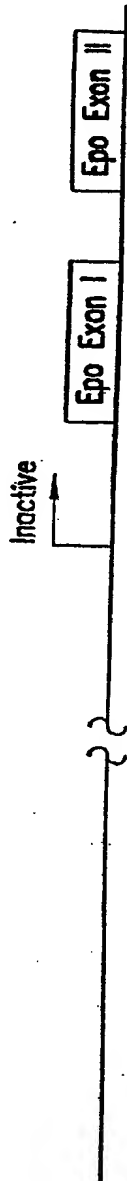
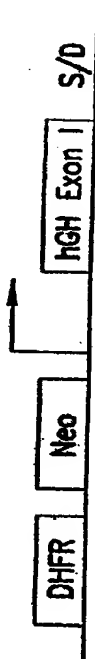


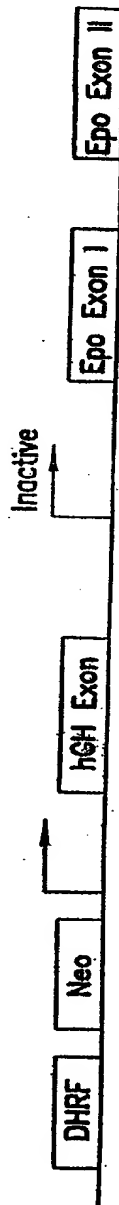


FIG. 1.

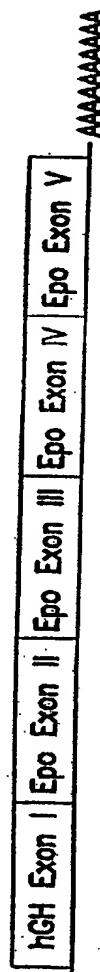
Random Activation of Gene Expression (RAGE)



Non-homologous Integration



Transcription and Splicing

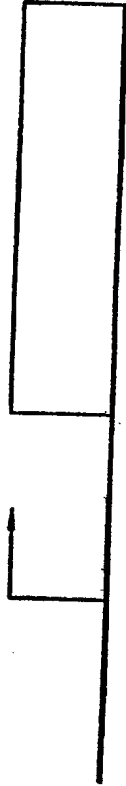


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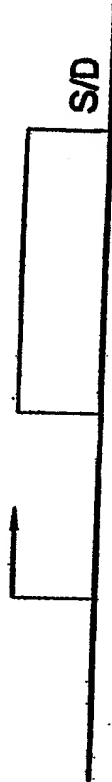
Activation Constructs without Translation Start Codons

Construct #

1



2



Untranslated

S/D Splice Donor

FIG. 2.

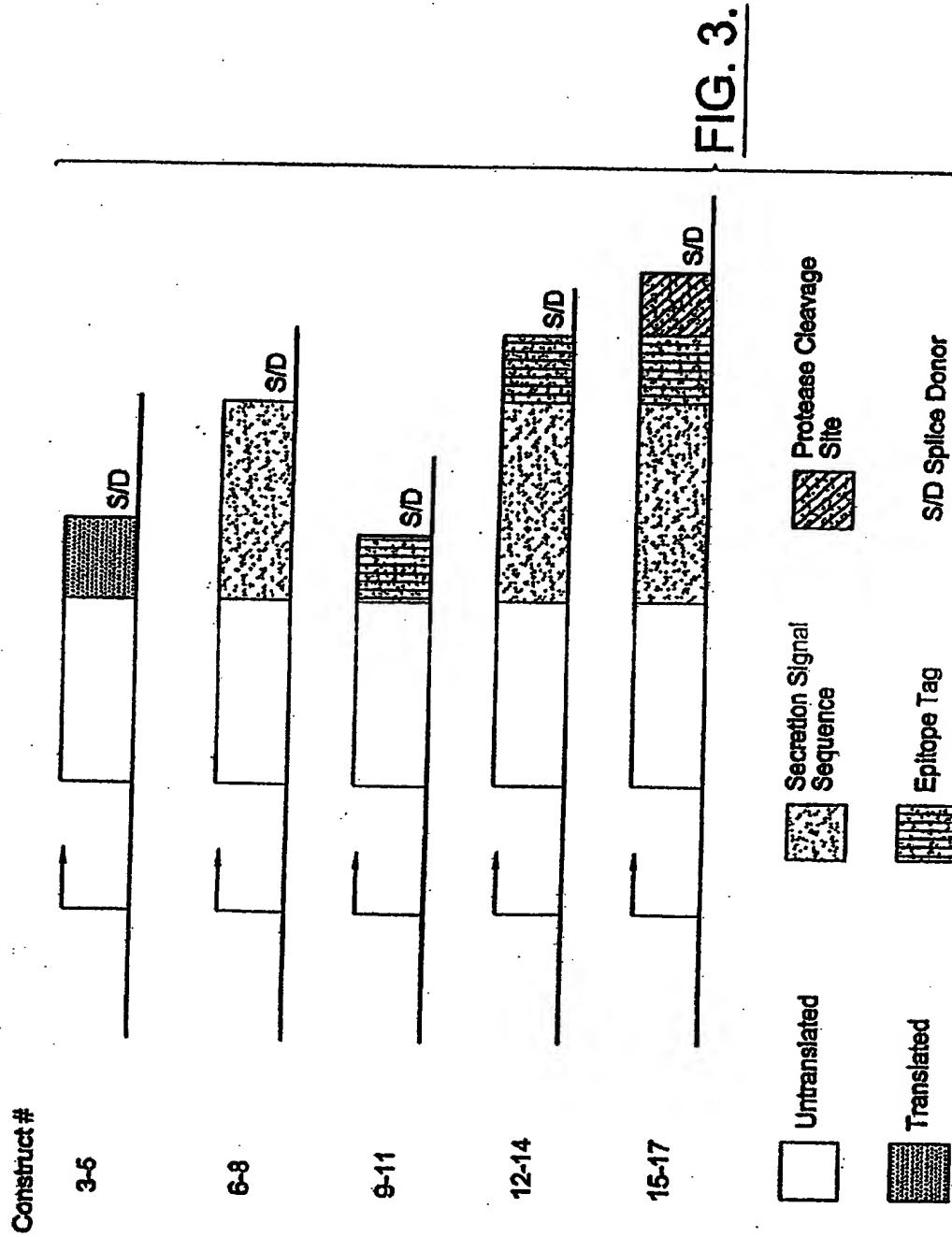


FIG. 3.

pRIG-1

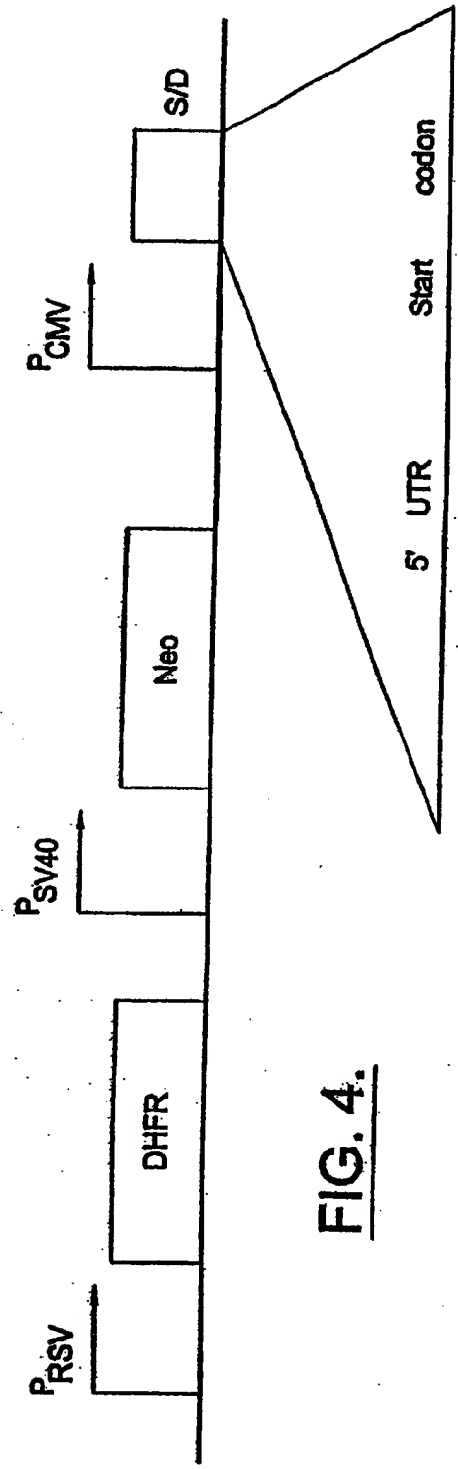


FIG. 4.



5' AGATCTTCAATATTGGCCATTAGCCATATTATTCATTGGTTATATAGCATAAATC
AATATTGGCTATTGGCCATTGCATA
CGTTGTATCTATATCATAATATGTACATTTATATTGGCTCATGTCCAATATGACCG
CCATGTTGGCATTGATTATTGACT
AGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGT
TCCGCGTTACATAACTTACGGTAAA
TGGCCCCGCTGGCTGACCGCCCAACGACCCCCGCCCATTGACGTCAATAATGACG
TATGTTCCCATAGTAACGCCAATAG
GGACTTTCCATTGACGTCAATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGC
AGTACATCAAGTGTATCATATGCCA
AGTCCGCCCCCTATTGACGTCAATGACGGTAAATGGCCCCGCTGGCATTATGCCC
AGTACATGACCTTACGGGACTTTCC
TACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGTTTT
GGCAGTACACCAATGGGCGTGGAT
AGCGGTTTGACTCACGGGGATTTCGAAGTCTCCACCCCATTGACGTCAATGGGAC
TTTGTTTTGGCACCAAATCAACGG
GACTTTCCAAAATGTCGTAACAACTGCGATCGCCCGCCCGTTGACGCAAATGGG
CGGTAGGCGTGTACGGTGGGAGGTC
TATATAAGCAGAGCTCGTTTAGTGAACCGTCAGATCACTAGAAGCTTTATTGCGG
TAGTTTATCACAGTTAAATTGCTAA
CGCAGTCAGTGCTTCTGACACAACAGTCTCGAACTTAAGCTGCAGTGACTCTCTT
AATTAAGTCCACCACTCTCACTTCA
GTTCCCTTTTGCCCTCCACCACTCTCACTTCAGTTCCTTTTGCATGAAGAGCTCAGAA
TCAAAAGAGGAAACCAACCCCTAA
GATGAGCTTTCCATGTAAATTTGTAGCCAGCTTCCTTCTGATTTTCAATGTTTCTT
CCAAAGGTGCAGTCTCCAAAGAGA
TTACGAATGCCTTGGAAACCTGGGGTGCCTTGGGTCAGGACATCAACTTGGACAT
TCCTAGTTTTCAAATGAGTGATGAT
ATTGACGATATAAATGGGAAAAAACTTCAGACAAGAAAAAGATTGCACAATTCA
GAAAAGAGAAAGAGACTTTCAAGGA
AAAAGATACATATAAGCTATTTAAAAATGGAACCTCTGAAAATTAAGCATCTGAAG
ACCGATGATCAGGATATCTACAAGG
TATCAATATATGATACAAAAGGAAAAAATGTGTTGGAAAAAATATTTGATTTGAA
GATTCAGAGAGGGTCTCAAAACCA
AAGATCTCCTGGACTTGTATCAACACAACCCTGACCTGTGAGGTAATGAATGGAA
CTGACCCCGAATTAAACCTGTATCA
AGATGGGAAACATCTAAACTTTTCTCAGAGGGTCATCACACACAAGTGGACCACC
AGCCTGAGTGCAAATTCAAGTGCA
CAGCAGGGAACAAAGTCAGCAAGGAATCCAGTGTGAGCCTGTCAGCTGTCCAG
AGAAAGGGATCCAGGTGAGTAGGGCC
CGATCCTTCTAGAGTCGAGCTCTCTTAAGGTAGCAAGGTTACAAGACAGGTTTAA
GGAGACCAATAGAACTGGGCTTGT
CGAGACAGAGAAGACTCTTGCGTTTCTGATAGGCACCTATTGGTCTTACGCGGCC
GCGAATTCCAAGCTTGAGTATTCTA
TCGTGTCACCTAAATAACTTGGCGTAATCATGGTCATATCTGTTTCTGTGTGAA
ATTGTTATCCGCTCACAATTCCACA
CAACATACGAGCCGGAAGCATAAAGTGTAAGCCTGGGGTGCCTAATGAGTGAC
CTAACTCACATTAATTGCGTTGCGCGATGCTTCCATTTTGTGAGGGTTAATGC-

FIG. 5A.



TTCGAGAAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACAAGAAT
GCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAA
CCATTATAAGCTGCAATAAACA
AGTTAACAACAACAATTGCATTCATTTTATGTTTCAGGTTTCAGGGGGAGATGTGG
GAGGTTTTTTAAAGCAAGTAAACC
TCTACAAATGTGGTAAAATCCGATAAGGATCGATTCCGGAGCCTGAATGGCGAAT
GGACGCGCCCTGTAGCGGCGCATT
AGCGCGCGGGTGTGGTGGTTACGCGCACGTGACCGCTACACTTGCCAGCGCCC
TAGCGCCCGCTCCTTTTCGCTTTCTTC
CCTTCCTTTCTCGCCACGTTCCGCCGGCTTTCCCGTCAAGCTCTAAATCGGGGGG
TCCCTTTAGGGTTCCGATTTAGTGC
TTTACGGCACCTCGACCCCAAAAACTTGATTAGGGTGATGGTTCACGTAGTGGG
CCATCGCCCTGATAGACGGTTTTTC
GCCCTTTGACGTTGGAGTCCACGTTCTTTAATAGTGGACTCTTGTTCCAACTGG
AACAACACTCAACCCTATCTCGGTC
TATTCTTTTGATTTATAAGGGATTTTGCCGATTTCCGGCCTATTGGTTAAAAAATGA
GCTGATTTAACAAAAATTTAACGC
GAATTTTAACAAAAATTTAACGCTTACAATTTCCGCTGTGTACCTTCTGAGGCGG
AAAGAACCAGCTGTGGAATGTGT
CAGTTAGGGTGTGGAAAGTCCCCAGGCTCCCCAGCAGGCAGAAGTATGCAAAGC
ATGCATCTCAATTAGTCAGCAACCAG
GTGTGGAAAGTCCCCAGGCTCCCCAGCAGGCAGAAGTATGCAAAGCATGCATCT
CAATTAGTCAGCAACCATAGTCCCGC
CCCTAACTCCGCCCATCCCGCCCTAACTCCGCCCAGTTCCGCCCATTTCTCCGCC
CCATGGCTGACTAATTTTTTTTATT
TATGCAGAGGCCGAGGCCGCTCGGCCCTCTGAGCTATTCCAGAAGTAGTGAGGA
GGCTTTTTTTGGAGGCCCTAGGCTTTTG
CAAAAAGCTTGATTCTTCTGACACAACAGTCTCGAACTTAAGGCTAGAGCCACCA
TGATTGAACAAGATGGATTGCACGC
AGGTTCTCCGGCCGCTTGGGTGGAGAGGCTATTCCGGCTATGACTGGGCACAACAC
ACAATCGGCTGCTCTGATGCCGCCG
TGTTCCGGCTGTCAGCGCAGGGGCGCCGGTTCTTTTTGTCAAGACCGACCTGTC
CGGTGCCCTGAATGAACTGCAGGAC
GAGGCAGCGCGGCTATCGTGGCTGGCCACGACGGGCGTTCTTGCGCAGCTGTG
CTCGACGTTGTCACTGAAGCGGGAAG
GGACTGGCTGCTATTGGGCGAAGTGCCGGGGCAGGATCTCCTGTCTATCTCACCTT
GCTCCTGCCGAGAAAGTATCCATCA
TGGCTGATGCAATGCGCGGCTGCATACGCTTGATCCGGCTACCTGCCCATTCGA
CCACCAATGCGAAACATCGCATCGAG
CGAGCACGTACTCGGATGGAAGCCGGTCTTGTCGATCAGGATGATCTGGACGAA
GAGCATCAGGGGCTCGCGCCAGCCGA
ACTGTTCCGCGAGGCTCAAGGCGCGCATGCCCGACGGCGAGGATCTCGTCGTGAC
CCATGGCGATGCCTGCTTGCCGAATA
TCATGGTGAAAATGGCCGCTTTTCTGGATTTCATCGACTGTGGCCGGCTGGGTGT
GGCGGACCGCTATCAGGACATAGCG
TTGGCTACCCGTGATATTGCTGAAGAGCTTGCGGCGAATGGGCTGACCGCTTCC
TCGTGCTTTACGGTATCGCCGCTCC
CGATTGCGAGCGCATCGCCTTCTATCGCCTTCTTGACGAGTTCTTCTGAGCGGGA
CTCTGGGGTTTCAAATGACCGACCAAGCGACGCCAACCTGCCATCACGATGGC-

FIG. 5B.

CGCAATAAAATATCTTTATTTTCATTACATCTGTGTGTTGGTTTTTGTGTGAAGA
TCCGCGTA-
TGGTGCACTCTCAGTACAATCTGCTCTGATGCCGCATAGTTAAGCCAGCCCCGAC
ACCCGCCAACAC
CCGCTGACGCGCCCTGACGGGCTTGTCTGCTCCCGGCATCCGCTTACAGACAAGC
TGTGACCGTCTCCGGGAGCTGCATG
TGTCAGAGGTTTTTACCCTCATCACCGAAACGCGCGAGACGAAAGGGCCTCGTGA
TACGCCTATTTTTATAGGTTAATGT
CATGATAATAATGGTTTCTTAGACGTCAAGTGGCACTTTTCGGGGAAATGTGCGC
GGAACCCCTATTTGTTTATTTTTCT
AAATACATTCAAATATGTATCCGCTCATGAGACAATAACCCTGATAAATGCTTCA
ATAATATTGAAAAGGAAGAGTATG
AGTATTCAACATTTCCGTGTGCGCCCTTATCCCTTTTTTTCGGGCATTTTGCCTTCC
TGTTTTTGTCTACCCAGAAACGCT
GGTGAAAGTAAAAGATGCTGAAGATCAGTTGGGTGCACGAGTGGGTACATCGA
ACTGGATCTCAACAGCGGTAAGATCC
TTGAGAGTTTTCGCCCCGAAGAACGTTTTCCAATGATGAGCACTTTTAAAGTTCT
GCTATGTGGCGCGGTATTATCCCGT
ATTGACGCGCGGCAAGAGCAACTCGGTGCGCGCATACACTATTCTCAGAATGACT
TGGTGAGTACTCACCAGTCACAGA
AAAGCATCTTACGGATGGCATGACAGTAAGAGAATTATGCAGTGCTGCCATAACC
ATGAGTGATAACACTGCGGCCAACT
TACTTCTGACAACGATCGGAGGACCGAAGGAGCTAACCGCTTTTTTGCACAACAT
GGGGGATCATGTAACTCGCCTTGAT
CGTTGGGAACCGGAGCTGAATGAAGCCATACCAAACGACGAGCGTGACACCACG
ATGCCTGTAGCAATGGCAACAACGTT
GCGCAAACTATTAAGTGGCGAACTACTTACTCTAGCTTCCCGGCAACAATTAATA
GACTGGATGGAGGCGGATAAAGTTG
CAGGACCACTTCTGCGCTCGGCCCTTCCGGCTGGCTGGTTTATTGCTGATAAATC
TGGAGCCGGTGAGCGTGGGTCTCGC
GGTATCATTGCAGCACTGGGGCCAGATGGTAAGCCCTCCCGTATCGTAGTTATCT
ACACGACGGGGAGTCAGGCAACTAT
GGATGAACGAAATAGACAGATCGCTGAGATAGGTGCCTCACTGATTAAGCATTGG
TAACTGTCAGACCAAGTTTACTCAT
ATATACTTTAGATTGATTTAAACTTCATTTTTTAATTTAAAGGATCTAGGTGAAG
ATCCTTTTTGATAATCTCATGACC
AAAATCCCTTAACGTGATTTTCGTTCCACTGAGCGTCAGACCCCGTAGAAAAGA
TCAAAGGATCTTCTTGAGATCCTTT
TTTTCTGCGCGTAATCTGCTGCTTGCAAACAAAAAACCACCGCTACCAGCGGTG
GTTTGTGTTGCCGGATCAAGAGCTAC
CAACTCTTTTTCCGAAGGTAAGTGGCTTCAGCAGAGCGCAGATACCAAATACTGT
CCTTCTAGTGTAGCCGTAGTTAGGC
CACCACTTCAAGAACTCTGTAGCACCGCCTACATACCTCGCTCTGCTAATCCTGT
TACCAAGTGGCTGCTGCCAGTGGCGA
TAAGTCGTGTCTTACCGGGTTGGACTCAAGACGATAGTTACCGGATAAGGCGCAG
CGGTGCGGCTGAACGGGGGGTTCGT
GCACACAGCCAGCTTGGAGCGAAGCAGCTACACCGAACTGAGATACCTACAGC
GTGAGCTATGAGAAAGCGCCACGCTT
CCCGAAGGGAGAAAGGCGGACAGGTATCCGGTAAGCGGCAGGGTCGGAACAGG-

FIG. 5C.

AGAGCGCACGAGGGAGCTTCCAGGGGGAAACGCCTGGTATCTTTATAGTCCTGTC
GGGTTTCGCCACCTCTGACTTGAGCGTCGATTTTTGTGATGCTCGTCAGGGG
GGCGGAGCCTATGGAAAAACGCCAGCAACGCGGCCTTTTACGGTTCCTGGCCTT
TTGCTGGCCTTTTGCTCACATGGCT
CGAC3'

FIG. 5D.

5AGATCTTCAATATTGGCCATTAGCCATATTATTCATTGGTTATATAGCATAAATC
AATATTGGCTATTGGCCATTGCAT
ACGTTGTATCTATATCATAATATGTACATTTATATTGGCTCATGTCCAATATGACC
GCCATGTTGGCATTGATTATTGAC
TAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAC
TTCCGCGTTACATAAATTACGGTAA
ATGGCCCGCCTGGCTGACCGCCCAACGACCCCGCCCATTTGACGTCAATAATGAC
GTATGTTCCCATAGTAACGCCAATA
GGGACTTTCCATTGACGTCAATGGGTGGAGTATTTACGGTAAACTGCCCACTTGG
CAGTACATCAAGTGTATCATATGCC
AAGTCCGCCCCCTATTGACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCG
CAGTACATGACCTTACGGGACTTTC
CTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGTT
TTGGCAGTACACCAATGGGCGTGGA
TAGCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCCATTTGACGTCAATGGGA
GTTTGTGTTTGGCACCAAAATCAACG
GGACTTTCCAAAATGTCGTAACAACCTGCGATCGCCCGCCCGTTGACGCAAATGG
GCGGTAGGCGGTGACGGTGGGAGGT
CTATATAAGCAGAGCTCGTTTAGTGAACCGTCAGATCACTAGAAGCTTTATTGCG
GTAGTTTATCACAGTTAAATTGCTA
ACGCAGTCAGTGCTTCTGACACAACAGTCTCGAACTTAAGCTGCAGTGAAGTCTCT
TAATTAAGTCCACCAAGTCTCACTTC
AGTTCCTTTTGCCTCCACCAAGTCTCACTTCAGTTCCTTTTGCATGAAGAGCTAGA
ATCAAAAGAGGAAACCAACCCCTA
AGATGAGCTTTCCATGTAAATTTGTAGCCAGCTTCCTTCTGATTTTCAATGTTTCT
TCCAAAGGTGCAGTCTCCAAAGAG
ATTACGAATGCCTTGGAAACCTGGGGTGCCTTGGGTGAGGACATCAACTTGGACA
TTCCCTAGTTTTCAAATGAGTGATGA
TATTGACGATATAAAATGGGAAAAAATTCAGACAAGAAAAAGATTGCACAATTC
AGAAAAGAGAAAGAGACTTTCAAGG
AAAAAGATACATATAAGCTATTTAAAAATGGAACCTCTGAAAATTAAGCATCTGAA
GACCGATGATCAGGATATCTACAAG
GTATCAATATATGATACAAAAGGAAAAAATGTGTTGGAAAAAATATTTGATTGGA
AGATTCAAGAGAGGGTCTCAAAACC
AAAGATCTCCTGGACTTGTATCAACACAACCCTGACCTGTGAGGTAATGAATGGA
ACTGACCCCGAATTAACCTGTATC
AAGATGGGAAACATCTAAAACCTTCTCAGAGGGTCATCACACACAAGTGGACCAC
CAGCCTGAGTGCAAAATTCAAGTGC
ACAGCAGGGAACAAAGTCAGCAAGGAATCCAGTGTGAGCCTGTGAGCTGTCCA
GAGAAAGGGATCCCAGGTGAGTAGGG
CCCGATCCTTCTAGAGTCGAGCTCTCTTAAGGTAGCAAGGTTACAAGACAGGTTT
AAGGAGACCAATAGAACTGGGCTT
GTCGAGACAGAGAAGACTCTTGCGTTTCTGATAGGCACCTATTGGTCTTACGCGG
CCGCGAATTCGAAGCTTGAGTATTC
TATCGTGTACCTAAATAACTTGGCGTAATCATGGTCATATCTGTTTCTGTGTGA
AATTGTTATCCGCTCACAATTCCA
CACACATACGAGCCGGAAGCATAAAGTGTAAGCCTGGGGTGCCTAATGAGTG
AGCTAACTCACATTAATTGCGTTGCG
CGATGCTTCCAATTTTGTGAGGGTAAATGCTTCGAGAAGACATGATAAGATACATT
GATGAGTTTGGACAAACCACAACAAGAATGCAGTGAAAAAATGCTTTATTTGT-

FIG. 6A.

GAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAA
CAAGTTAACAACAACAATTGCATTCAATTTATGTTTCAGGTTTCAGGGGGAGATGT
GGGAGGTTTTTTAAAGCAAGTAAA
CCTCTACAAATGTGGTAAATCCGATAAGGATCGATTCCGGAGCCTGAATGGCGA
ATGGACGCGCCCTGTAGCGGCGCAT
TAAGCGCGGGGGTGTGGTGGTTACGCGCACGTGACCGCTACACTTGCCAGCGC
CCTAGCGCCCGCTCCTTTTCGCTTTCT
TCCCTTCCTTTCTCGCCACGTTTCGCCGGCTTTCCCGCTCAAGCTCTAAATCGGGG
GCTCCCTTTAGGGTTCCGATTTAGT
GCTTTACGGCACCTCGACCCCAAAAACTTGATTAGGGTGATGGTTCACGTAGTG
GGCCATCGCCCTGATAGACGGTTTT
TCGCCCTTTGACGTTGGAGTCCACGTTCTTTAATAGTGGACTCTTGTTCCAAACTG
GAACAACACTCAACCCTATCTCGG
TCTATTCTTTTGATTTATAAGGGATTTTGCCGATTTCCGGCCTATTGGTTAAAAAT
GAGCTGATTTAACAATAAATTTAAC
GCGAATTTTAACAAAATATTAACGCTTACAATTTCCGCTGTGTACCTTCTGAGGC
GGAAAGAACCAGCTGTGGAATGTGT
GTCAGTTAGGGTGTGGAAAGTCCCCAGGCTCCCCAGCAGGCAGAAAGTATGCAAA
GCATGCATCTCAATTAGTCAGCAACC
AGGTGTGGAAAGTCCCCAGGCTCCCCAGCAGGCAGAAAGTATGCAAAGCATGCAT
CTCAATTAGTCAGCAACCATAGTCCC
GCCCCTAACCTCCGCCCATCCCGCCCTAACTCCGCCCAGTTCCGCCCATTTCTCCG
CCCCATGGCTGACTAATTTTTTTTA
TTTATGCAGAGGCCGAGGCCGCTCGGCCCTCTGAGCTATTCCAGAAGTAGTGAGG
AGGCTTTTTTGGAGGCCCTAGGCTTT
TGCAAAAAGCTTGATTCTTCTGACACAACAGTCTCGAACTTAAGGCTAGAGCCAC
CATGATTGAACAAGATGGATTGCAC
GCAGGTTCTCCGGCCGCTTGGGTGGAGAGGCTATTCCGGCTATGACTGGGCACAAC
AGACAATCGGCTGCTCTGATGCCGC
CGTGTTCGGCTGTGAGCGCAGGGGCGCCCGGTTCTTTTTGTCAAGACCGACCTG
TCCGGTGCCCTGAATGAATGCAGG
ACGAGGCAGCGCGGCTATCGTGGCTGGCCACGACGGGCGTTCTTGGCGAGCTG
TGCTCGACGTTGTCACTGAAGCGGGA
AGGGACTGGCTGCTATTGGGCGAAGTGCCGGGGCAGGATCTCCTGTCATCTCACC
TTGCTCCTGCCGAGAAAGTATCCAT
CATGGCTGATGCAATGCGGCGGCTGCATACGCTTGATCCGGCTACCTGCCCATTC
GACCACCAAGCGAAACATCGCATCG
AGCGAGCACGTACTCGGATGGAAGCCGGTCTTGTGATCAGGATGATCTGGACG
AAGAGCATCAGGGGCTCGCGCCAGCC
GAACTGTTCCGCCAGGCTCAAGGCGCGCATGCCCGACGGCGAGGATCTCGTCGTG
ACCCATGGCGATGCCTGCTTGCCGAA
TATCATGGTGGAAAATGGCCGCTTTTCTGGATTCATCGACTGTGGCCGGCTGGGT
GTGGCGGACCGCTATCAGGACATAGCGTTGGCTACCCGTGATATTGCTGAAGAGC
TTGGCGGCGAATGGGCTGACCGCTTCTCGTGCTTTACGGTATCGCCGCT
CCCGATTGCGAGCGCATCGCCTTCTATCGCCTTCTTGACGAGTTCTTCTGAGCGG
GACTCTGGGGTTCCGAAATGACCGAC
CAAGCGAGCCCAACCTGCCATCAGGATGGCCGCAATAAAATATCTTTATTTTCA
TTACATCTGTGTGTTGGTTTTTGT
GTGAAGATCCGCGTATGGTGCACCTCTCAGTACAATCTGCTCTGATGCCGCATAGT
TAAGCCAGCCCCGACACCCGCCAACACCCGCTGACGCGCCCTGACGGGCT-

FIG. 6B.

TGTCGCTCCCGGCATCCGCTTACAGACAAGCTGTGACCGTCTCCGGGAGCTGCA
TGTGTCAGAGGTTTTTACCCTCATCACCGAAACGCGCGAGACGAAAGGGCCTCGT
GATACGCCTATTTTTATAGGTTAAT
GTCATGATAATAATGGTTTTCTTAGACGTCAAGTGGCACTTTTCGGGGAAATGTGC
GCGGAACCCCTATTTGTTTTATTTT
CTAAATACATTCAAATATGTATCCGCTCATGAGACAATAACCCTGATAAATGCTT
CAATAATATTGAAAAAGGAAGAGTA
TGAGTATTCAACATTTCCGTGTGCGCCTTATTCCCTTTTTTTCGGGCATTTTGCCTT
CCTGTTTTTTGCTCACCCAGAAACG
CTGGTGAAAGTAAAAGATGCTGAAGATCAGTTGGGTGCACGAGTGGGTACATC
GAACTGGATCTCAACAGCGGTAAAGT
CCTTGAGAGTTTTTCGCCCCGAAGAAGCTTTTCCAATGATGAGCACTTTTAAAGTT
CTGCTATGTGGCGCGGTATTATCCC
GTATTGACGCCCGGCAAGAGCAAGTCCGGTCGCCGCATACACTATTCTCAGAATGA
CTTGGTTGAGTACTCACCAGTCACA
GAAAAGCATCTTACGGATGGCATGACAGTAAGAGAATTATGCAGTGCTGCCATAA
CCATGAGTGATAACACTGCGGCCAA
CTTACTTCTGACAACGATCGGAGGACCGAAGGAGCTAACCCTTTTTTGCACAAC
ATGGGGGATCATGTAACCTCGCCTTG
ATCGTTGGGAACCGGAGCTGAATGAAGCCATACCAAACGACGAGCGTGACACCA
CGATGCCTGTAGCAATGGCAACAACG
TTGCGCAAACTATTAAGTGGCGAACTACTTACTCTAGCTTCCCGGCAACAATTAA
TAGACTGGATGGAGGCGGATAAAGT
TGCAGGACCACTTCTGCGCTCGGCCCTTCCGGCTGGCTGTTTATTGCTGATAAA
TCTGGAGCCGGTGAGCGTGGGTCTC
GCGGTATCATTGCAGCACTGGGGCCAGATGGTAAGCCCTCCCGTATCGTAGTTAT
CTACACGACGGGGAGTCAGGCAACT
ATGGATGAACGAATAGACAGATCGCTGAGATAGGTGCCTCACTGATTAAGCATT
GGTAAGTGTGACACCAAGTTTACTC
ATATATACTTTAGATTGATTTAAACTTCATTTTAAATTTAAAGGATCTAGGTGA
AGATCCTTTTTTGATAATCTCATGA
CCAAAATCCCTTAACGTGAGTTTTTCGTTCCACTGAGCGTCAGACCCCGTAGAAAA
GATCAAAGGATCTTCTTGAGATCCT
TTTTTTCTGCGCGTAATCTGCTGCTTGCAAAACAAAAAACACCGCTACCAGCGG
TGGTTTTGTTTGCCGGATCAAGAGCT
ACCAACTCTTTTTTCEGAAGGTAAGTGGGTTTCAGCAGAGCGCAGATACCAAATACT
GTCCTTCTAGTGTAGCCGTAGTTAG
GCCACCACTTCAAGAACTCTGTAGCACCGCCTACATACCTCGCTCTGCTAATCCT
GTTACCACTGGCTGCTGCCAGTGGCGATAAGTCTGTCTTACCGGGTTGGACTCA
AGACGATAGTTACCGGATAAGGCGCAGCGGTCCGGCTGAACGGGGGGTTC
GTGCACACAGCCCAGCTTGGAGCGAACGACCTACACCGAACTGAGATACCTACA
GCGTGAGCTATGAGAAAGCGCCACGC
TTCCCGAAGGGAGAAAGGCGGACAGGTATCCGGTAAGCGGCAGGGTCGGAACAG
GAGAGCGCACGAGGGAGCTTCCAGGG
GGAAACGCCTGGTATCTTTATAGTCTGTGCGGTTTCGCCACCTCTGACTTGAGC
GTCGATTTTTGTGATGCTCGTCAGG
GGGGCGGAGCCTATGGAAAAACGCCAGCAACGCGGCCTTTTTACGGTTCCTGGC
CTTTTGCTGGCCTTTTGCTCACATGG
CTCGAC3'

FIG. 6C.

SAGATCTTCAATATTGGCCATTAGCCATATTATTCATTGGTTATATAGCATAAATC
AATATTGGCTATTGGCCATTGCAT
ACGTTGTATCTATATCATATATGTACATTTATATTGGCTCATGTCCAATATGACC
GCCATGTTGGCATTGATTATTGAC
TAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAG
TTCCGCGTTACATAACTTACGGTAA
ATGGCCCGCCTGGCTGACCGCCCAACGACCCCGCCCATTGACGTCAATAATGAC
GTATGTTCCCATAGTAACGCCAATA
GGGACTTTCCATTGACGTCAATGGGTGGAGTATTTACGGTAAACTGCCCACTTGG
CAGTACATCAAGTGTATCATATGCC
AAGTCCGCCCCCTATTGACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCC
CAGTACATGACCTTACGGGACTTTC
CTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGT
TTGGCAGTACACCAATGGGCGTGGG
TAGCGGTTTGACTCACGGGGATTTCGAAGTCTCCACCCCATTGACGTCAATGGGA
GTTTGTGTTTGGCACCACCAATCAACG
GGACTTTCCAAATGTGTAACAACTGCGATCGCCCGCCCGTTGACGCAAATGG
GCGGTAGCGGTGTACGGTGGGAGGT
CTATATAAGCAGAGCTCGTTTAGTGAACCGTCAGATCACTAGAAGCTTTATTGCG
GTAGTTTATCACAGTTAAATTGCTA
ACGCAGTCAGTGCTTCTGACACAACTCTCGAACTTAAGCTGCAGTGACTCTCT
TAATTAACCTCCACAGTCTCACTTC
AGTTCCTTTTGCCTCCACAGTCTCACTTCAGTTCCTTTTGCATGAAGAGCTCAGA
ATCAAAAGAGGAAACCAACCCCTA
AGATGAGCTTTCATGTAAATTTGTAGCCAGCTTCCTTCTGATTTTCAATGTTTCT
TCCAAAGGTGCAGTCTCCAAAGAG
ATTACGAATGCCTTGGAAACCTGGGGTGCTTGGGTGACGACATCAACTTGGACA
TTCCTAGTTTTCAAATGAGTGATGA
TATTGACGATATAAAATGGGAAAAAATTCAGACAAGAAAAAGATTGCACAATTC
AGAAAAGAGAAAGAGACTTTCAAGG
AAAAAGATACATATAAGCTATTTAAAAATGGAACCTGAAAAATTAAGCATCTGAA
GACCGATGATCAGGATATCTACAAG
GTATCAATATATGATACAAAAGGAAAAATGTGTTGGAAAAAATATTTGATTGA
AGATTCAAGAGAGGGTCTCAAAACC
AAAGATCTCCTGGACTTGTATCAACACAACCTGACCTGTGAGGTAATGAATGGA
ACTGACCCCGAATTAAACCTGTATC
AAGATGGGAAACATCTAAACTTTCTCAGAGGGTCATCACACACAAGTGGACCAC
CAGCCTGAGTGCAAAATTCAGTGC
ACAGCAGGGAACAAAGTCAGCAAGGAATCCAGTGTGAGCCTGTGAGCTGTCCA
GAGAAAGGGATCCACAGGTGAGTAGG
GCCCGCTCCTTCTAGAGTCGAGTCTCTTAAGGTAGCAAGGTTACAAGACAGGTT
TAAGGAGACCAATAGAACTGGGCT
TGTCGAGACAGAGAAGACTTTGCGTTTCTGATAGGCACCTATTGGTCTTACGCG
GCCGCGAATTCCAAGCTTGAGTATT
CTATCGTGTACCTAAATAACTTGGCGTAATCATGGTCATATCTGTTTCCTGTGTG
AAATTGTTATCCGCTCACAATTCC
ACACAACATACGAGCCGGAAGCATAAAGGTAAAGCCTGGGGTGCCTAATGAGT
GAGCTAACTCACATTAATTGCGTTGC
GCGATGCTTCCATTTTGTGAGGGTTAATGCTTCGAGAAGACATGATAAGATACAT
TGATGAGTTTGGACAAACCACAACAAGATGCAGTGAAAAAATGC-

FIG. 7A.

TTTATTTGTGAAATTTGTGATG
CTATTGCTTTATTTGTAACCATTATAAGCTGCAATAA
ACAAGTTAACAACAACAATTGCATTCTTTATGTTTCAGGTTTCAGGGGGAGATG
TGGGAGGTTTTTAAAGCAAGTAAA
ACCTCTACAAATGTGGTAAAATCCGATAAGGATCGATTCCGGAGCCTGAATGGCG
AATGGACGCGCCCTGTAGCGGCGCA
TTAAGCGCGGCGGGTGTGGTGGTTACGCGCACGTGACCGCTACACTTGCCAGCGC
CCTAGCGCCCGCTCCTTTTCGCTTTC
TTCCCTTCCTTTCTCGCCACGTTCCGCGGCTTTCCCGTCAAGCTCTAAATCGGGG
GCTCCCTTTAGGGTTCGATTTAG
TGCTTTACGGCACCTCGACCCCAAAACTTGATTAGGGTGATGGTTCACGTAGT
GGGCCATCGCCTGATAGACGGTTT
TTCCGCTTTGACGTTGAGTCCACGTTCTTTAATAGTGGACTCTTGTTCAAACT
GGAACAACACTCAACCCTATCTCG
GTCTATTCTTTTGATTTATAAGGGATTTTGGCGATTTCGGCCTATTGGTTAAAAAA
TGAGCTGATTTAACAATAATTAA
CGCGAATTTAACAATAATTAAACGCTTACAATTTCCGCTGTGTACCTTCTGAGG
CGGAAAGAACCAGCTGTGGAATGTG
TGTCAGTTAGGGTGTGGAAGTCCCCAGGCTCCCCAGCAGGCAGAAGTATGCAA
AGCATGCATCTCAATTAGTCAGCAAC
CAGGTGTGGAAGTCCCCAGGCTCCCCAGCAGGCAGAAGTATGCAAAGCATGCA
TCTCAATTAGTCAGCAACCATAGTCC
CGCCCTAACTCCGCCCATCCCCGCCCTAACTCCGCCCAGTTCCGCCCATTTCTCC
GCCCATGGCTGACTAATTTTTTTT
ATTTATGCATGAGGCGAGGCGCGCTCGGCTCTGAGCTATTCCAGAAGTAGTGAG
GAGGCTTTTGGAGGCTAGGCTT
TTGCAAAAAGCTTGATTCTTCTGACACAACAGTCTCGAACTTAAGGCTAGAGCCA
CCATGATTGAACAAGATGGATTGCA
CGCAGGTTCTCCGCCGCTTGGGTGGAGAGGCTATTCCGCTATGACTGGGCACAA
CAGACAATCGGCTGCTCTGATGCCG
CCGTGTTCGGCTGTGAGCGCAGGGGGCGCCGGTCTTTTTGTCAAGACCGACCT
GTCCGGTGCCCTGAATGAAGTGCAG
GACGAGGCAGCGCGGCTATCGTGGCTGGCCACGACGGGCGTTCTTGCGCAGCT
GTGCTCGACGTTGTCACTGAAGCGGG
AAGGGACTGGCTGCTATTGGGCGAAGTGCCGGGGCAGGATCTCCTGTCTATCTCAC
CTTGCTCCTGCCGAGAAAGTATCCA
TCATGGCTGATGCAATCGGGCGCTGCATACGCTTGATCCGGCTACCTGCCCCATT
CGACCACCAAGCGAAACATCGCATC
GAGCGAGCACGTACTCGGATGGAAGCCGGTCTTGTGATCAGGATGATCTGGAC
GAAGAGCATCAGGGGCTCGCGCCAGC
CGAACTGTTCCGACGGCTCAAGGCGCGCATGCCGACGGCGAGGATCTCGTCGT
GAACCATGGCGATGCCGTGCTTGCCGA
ATATCATGGTGGAAATGGCCGCTTTTCTGGATTATCATGATGTGGCCGGCTGGG
TGTGGCGGACGCTATCAGGACATA
GCGTTGGCTACCGTGATATTGCTGAAGAGCTTGGCGGCAATGGGCTGACCGCT
TCCTCGTGCTTTACGGTATCGCCG
TCCCGATTCCGAGCGCATCGCCTTCTATCGCCTTCTTGACGAGTTCTTCTGAGCC
GGACTCTGGGGTTTGAATGACCGA
CCAAGCGACGCCAACCTGCCATCAGATGGCCGCAATAAAATATCTTTATTTTC
ATTACATCTGTGTGTTGGTTTTTGTGAAGATCCGCGTATGGTGCACTCTC-

FIG. 7B.

AGTACAATCTGCTCTGATGCCGCATAGTTAAGCCAGCCCCGACACCCGCCAA
CACCCGCTGACGCGCCCTGACGGGCTTGTCTGCTCCCGGCATCCGCTTACAGACA
AGCTGTGACCGTCTCCGGGAGCTGC
ATGTGTCAGAGGTTTTACCGTCATCACCGAAACGCGCGAGACGAAAGGGCCTCG
TGATACGCCCTATTTTTATAGGTTAA
TGTCATGATAATAATGGTTTCTTAGACGTCAGGTGGCACTTTTCGGGGAAATGTG
CGCGGAACCCCTATTTGTTTTATTTT
TCTAAATACATTCAAATATGTATCCGCTCATGAGACAATAACCCGTATAAATGCT
TCAATAATATTGAAAAAGGAAGAGT
ATGAGTATTCAACATTTCCGTGTCCGCCCTTATTCCCTTTTTTTCGGGCATTTTGCCT
TCTGTTTTTGCTCACCCAGAAAC
GCTGGTGAAAGTAAAAGATGCTGAAGATCAGTTGGGTGCACGAGTGGGTTACAT
CGAACTGGATCTCAACAGCGGTAAGA
TCCTTGAGAGTTTTCGCCCCGAAGAACGTTTTCCAATGATGAGCACTTTTAAAGT
TCTGCTATGTGGCGCGGTATTATCC
CGTATTGACGCCGGGCAAGAGCAACTCGGTGCGCCGATACACTATTCTCAGAATG
ACTTGGTTGAGTACTCACCAGTCAC
AGAAAGCATCTTACGGATGGCATGACAGTAAGAGAATTATGCAGTGCTGCCATA
ACCATGAGTGATAACACTGCCGCCA
ACTTACTTCTGACAACGATCGGAGGACCGAAGGAGCTAACCGCTTTTTTGACAA
CATGGGGGATCATGTAACCTCGCCTT
GATCGTTGGGAACCGGAGCTGAATGAAGCCATACCAAACGACGAGCGTGACACC
ACGATGCCTGTAGCAATGGCAACAAC
GTTGCGCAACTATTAACCTGGCGAACTACTTACTCTAGCTTCCCGGCAACAATTA
ATAGACTGGATGGAGGCGGATAAG
TTGACGAGCACTTCTGCGCTCGGCCCTTCCGGCTGGCTGGTTTATTGCTGATAA
ATCTGGAGCGGTGAGCGTGGGTCT
CGCGGTATCATTTGACGACTGGGGCCAGATGGTAAGCCCTCCCGTATCGTAGTTA
TCTACACGACGGGGAGTCAGGCAAC
TATGGATGAACGAAATAGACAGATCGCTGAGATAGGTGCCTCACTGATTAAGCAT
TGGTAACTGTCAGACCAAGTTTACT
CATATATACTTTAGATTGATTTAAACTTCATTTTTAATTTAAAGGATCTAGGTG
AAGATCCTTTTTTGATAATCTCATG
ACCAAAATCCCTTAACGTGAGTTTTCGTTCCACTGAGCGTCAGACCCCGTAGAAA
AGATCAAAGGATCTTCTTGAGATCC
TTTTTTTCTGCGCGTAATCTGCTGCTTGCAAACAAAAAACCACCGCTACCAGCG
GTGGTTTGTFTGCGGGATCAAGAGC
TACCAACTCTTTTTCCGAAGGTAACCTGGCTTCAGCAGAGCGCAGATACCAAATAC
TGTECTTCTAGTGTAGCCGTAGTTA
GGCCACCACTTCAAGAACTCTGTAGCACCGCCTACATACCTCGCTCTGCTAATCC
TGTTACCACTGGCTGCTGCCAGTGG
CGATAAGTCTGTCTTACCGGGTTGGACTCAAGACGATAGTTACCGGATAAGGCG
CAGCGGTCCGGCTGAACGGGGGGTT
CGTGACACAGCCAGCTTGGAGCGAACGACCTACACCGAACTGAGATACCTAC
AGCGTGAGCTATGAGAAAGCGCCACGCTTCCGAAGGGAGAAAGGCGGACAGGT
ATCCGGTAAGCGGCAGGGTCGGAACAGGAGAGCGCAGGAGGAGCTTCCAGG
GGGAAACGCCCTGGTATCTTTATAGTCTGTGCGGTTTTGCCACCTCTGACTTGAG
CGTCGATTTTTGTGATGCTCGTCAG
GGGGGCGGAGCCTATGGAAAAACGCCAGCAACGCGGCCTTTTTACGGTTCTCGG
CCTTTTGCTGGCCTTTTGCTCACATGGCTCGAC3'

FIG. 7C.

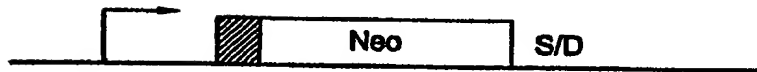
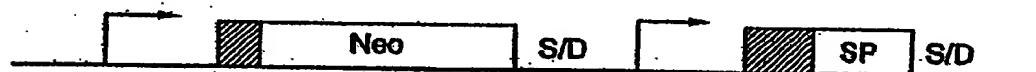
FIG. 8A.FIG. 8B.FIG. 8C.FIG. 8D.FIG. 8E.FIG. 8F.

FIG. 9A.



FIG. 9B.



FIG. 9C.

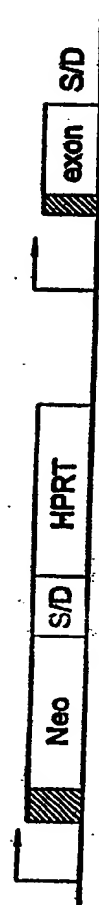


FIG. 9D.

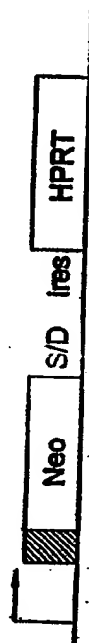


FIG. 9E.



FIG. 9F.

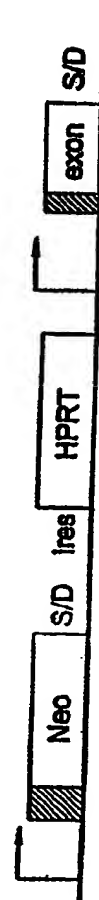
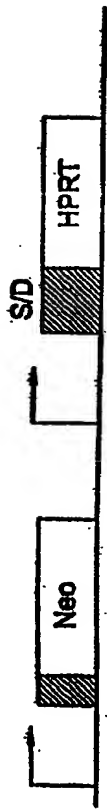
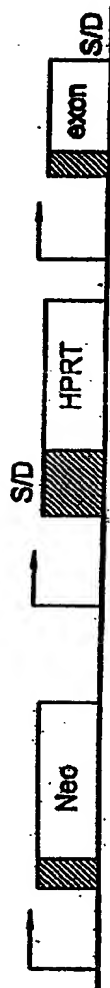


FIG. 10A.FIG. 10B.FIG. 10C.FIG. 10D.FIG. 10E.FIG. 10F.

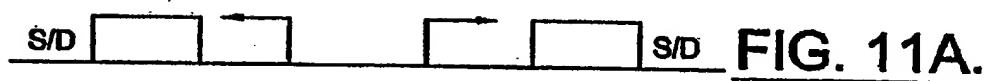
FIG. 11A.FIG. 11B.FIG. 11C.



FIG. 12A.



FIG. 12B.



FIG. 12C.

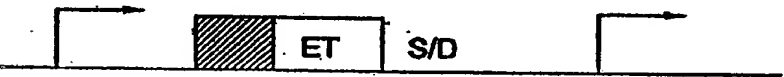


FIG. 12D.



FIG. 12E.



FIG. 12F.



FIG. 12G.

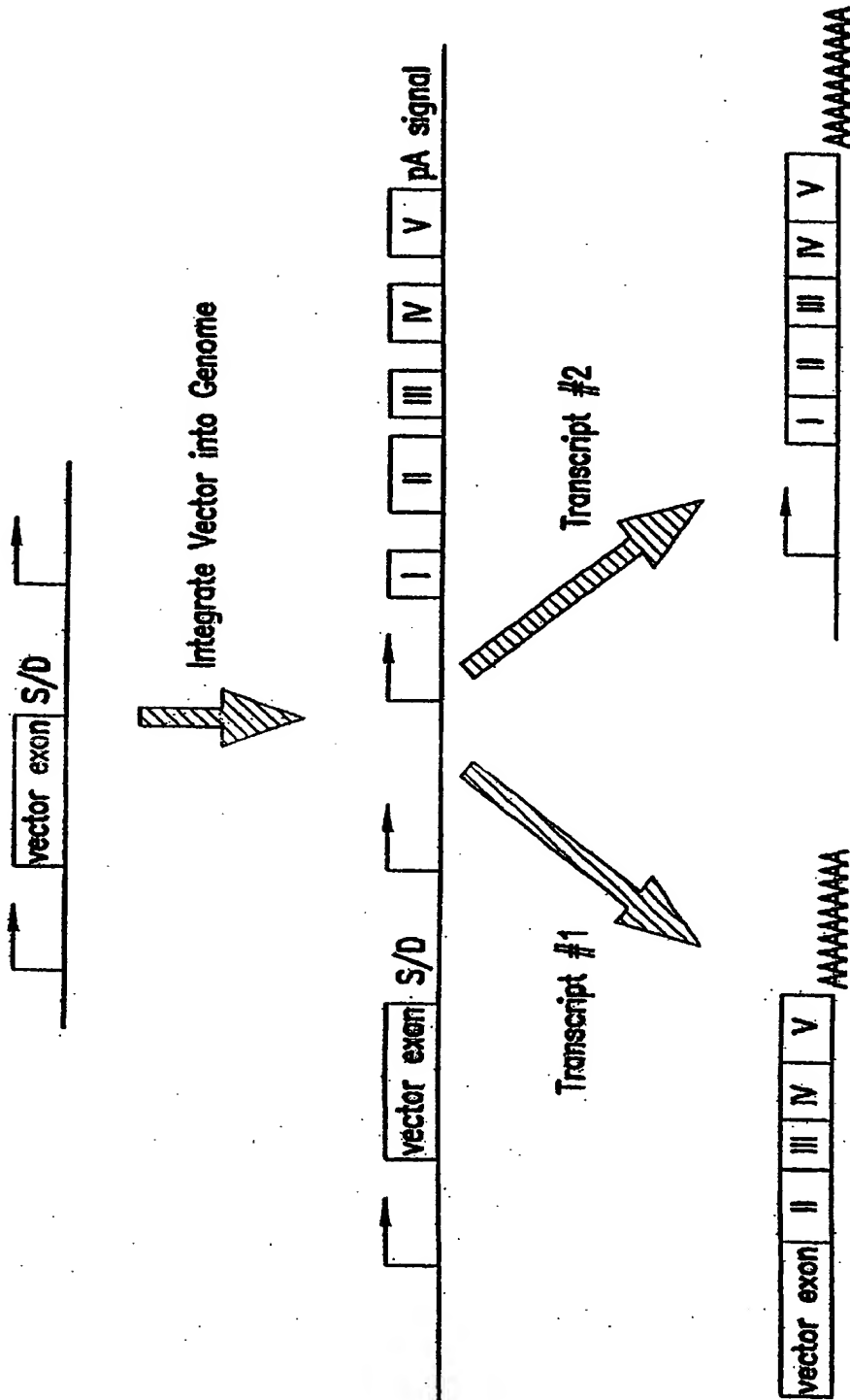


FIG. 13.

FIG. 14A.

GTCCGCCCCCTAATCCGCCCATCCGCCCTAATCCGCCCAAGTTCGCCCAATTCGCCGCC
ATGGCTGACTAATTTTTTTTATTTATGACAGAGCCGAGGCCGCTCGGCTCTGAGCTATTCC
AGAAGTAGTGAGGAGGCTTTTTGGAGGCTAGGCTTTTGCAAAAGCTTGATTCTTCGACA
CAACAGTCTCGAATTAAGGCTAGAGCCACCATGATTGAACAAGATGGATTGCACGAGGTT
CTCCGCCGCTTGGGTGGAGAGGCTATTCGGCTATGACTGGGCACAACAGACAATCGGCTGC
CTGATGCCGCCGTGTTCGGCTGTGAGCGCAGGGGCGCCGGTCTTTTGTCAAGACCGAC
CTGTCGGGTGCCCTGAATGAAGTGCAGGACGAGGCAGCGGGCTATCGTGGCTGGCCACGAC
GGGCGTTCCTTGGCGAGCTGTGCTCGACGTTGTCACTGAAGCGGGAAGGGACTGGCTGCTATT
GGGCGAAGTGGCGGGCAGGATCTCCGTGTCATCTACCTTGCTCCTGCCGAGAAAGTATCCAT
CATGGCTGATGCAATGCCGGCGCTGCATACGCTTGATCCGGCTACCTGCCATTTCGACCACCA
AGCGAAACATCGCATCGAGCGAGCAGTACTCGGATGGAAGCCGGTCTTGTCGATCAGGATG
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ATGCCCGACGGGAGGATCTCGTGTGACCCATGGCGATGCTTGGCTGCCGAATATCATGGT
GAAAAAGGCCGCTTTCTGGATTATCGACTGTGGCGGCTGGGTGGCGGAGCCGTATCGG
GACATAGCGTGGCTACCGGTGATTTGCTGAAGAGCTTGGCGGGAATGGGCTGACCGCTTC
CTCGTGGCTTACGGTATCGCGCTCCGATTCCGAGCGCATCGCTTCTATCGCTTCTTGAGC
AGTTCTCTGAGCGGACTCTGGGGTTGAAATGACCGACCAAGCGACGCCCAACCTGCCAT
CAGGATGGCGCAATAAATATCTTTATTTTCAATTACATCTGTGTGTTGGTTTTTGTGGAAG
ATCCGCTATGGTGCCACTCTCAGTACAATCTGCTCTGATGCCGATAGTTAAGCCAGCCCCGA
CACCCGCAACACCCGCTGACCGGCCCTGACGGGCTTGCTGCTCCCGGCATCCGCTTACAGA
CAAGCTGTGACCGTCTCCGGGAGCTGCATGTGTGAGAGGTTTTTCCCGTATCACCAGAACGC
CGGAGACGAAGGCCCTCGTGATACCGCTATTTTATAGTTAATGTCATGATAAATATGGTT
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GAAAAAGGAGATGAGTATTCACATTTCCGTGTGCGCTTATTCCTTTTTTTCGGGCAT
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GCCCGAAGAACGTTTCCAATGATGAGCACTTTTAAAGTCTGTATGTGGCGCGTATTAT
CCGCTATTGACCGCGGCAAGACCACTCGGTCCCGCATACACTATTCTCAGAATGACTTGG
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AGTGTGCCATAACCATGAGTGATAACACTGCGGCCAATTAATCTGACAAACGATCGGAGC
ACCGAAGGAGCTAACCGCTTTTTTGCAACAATGGGGGATCATGTAACTCGCCTTGATCGTTG
GGAACCGGAGCTGAATGAAGCCATACCAACGACGAGCGTGACACCATGCTGTAGCAA
TGGCAACAACGTTGCGCAAACTATTAACCTGGCGAATCTTACTCTAGCTTCCCGGCAACAT
TAATAGACTGGATGGAGCGGATAAAGTTGCAGGACCACTTCTGCGCTCGGCCCTTCGGCT
GGCTGGTTTATGGCTGATAAATCTGGAGCGGTGAGCGTGGTCTCGCGGTATCATTGCAGCA
CTGGGGCCAGATGGTAAGCCCTCCGATATCGTAGTTATCTACACGACGGGAGTCAGGCAAC
TATGGATGAACGAATAGACAGATCGCTGAGATAGTGGCTCACTGATTAGCATTTGGTAAC
TGTACAGCAAGTTTACTCATATATAGTTAGATGATTAAACTTCAATTTAATTTAAAG
GATCTAGGTGAGATCTTTTGTATATCTGATGACCAAAATCCCTAACSTGAGTTTCGTT
CCACTGAGCGTCAGACCCGTAAGAAAGATCAAGGATCTTCTTGAGATCTTTTTTCTGCG
DGTAACTGCTGCTTGCAACAAAAAACCCGCTAGCAGCGGTGTTGTTTGCGGATCA
AGAGCTACCAACTCTTTTCCGAAGGTAATGGCTTCAGCAGAGCGAGATACCAAAATCTGT
CCTTCTAGTGTAGCCGTAGTTAGGCCACCACTTCAAGAACTCTGTAGCACCGCTACATACCT
CGCTCTGCTAATCTGTACCAATGCTGCTGCGAGTGGCGATAAGTCTGTCTTACCGGTT
GGACTCAAGACGATAGTTACCGGATAAGGCGCAGCGTGGGCTGAACGGGGGTTCGTGCA
CACAGCCAGCTTGGAGCGAAGCAGCTACACCGAAGTGAAGATACCTACAGCGTGAAGCTATGA
GAAAGCGCCAGCTTCCGGAAGGGAGAAAGCGGACAGGTATCCGTAAGCGGCGAGGTCG
GAACAGGAGAGCGCAGAGGAGCTTCCAGGGGAAACGCCGTGATCTTATAGTCTGTG
GGTTTTCGCCACCTCTGACTTGAGCGTCGATTTTGTGATGCTCGTCAGGGGGCGGAGCCTA
TGAAAAACGCCAGCAACCGGCCTTTTACGGTTCTGGCTTTTGTGCGCTTTTGCTCAC
ATGGCTCGAC

FIG. 14B.

FIG. 15A

CTATTGGGCGAAGTGCCGGGGCAGGATCTCCTGTCATCTCACCTTGCTCCTGCCGAGAAAGTA
TCCATCATGGCTGATGCAATGCCGGGGCTGCATACGCTTGATCCGGCTACCTGCCCATTCGAC
CACCAAGCGAAACATCGCATCGAGCGAGCACGTACTCGGATCGAAGCCGGTCTTGTCGATCA
GGATGATCTGGACGAAGAGCATCAGGGGCTCGCGCCAGCCGAAGTGTTCGCCAGGCTCAAGG
CGCGCATGCCGACGGCGAGGATCTCGTCGTGACCCATGCCGATGCCCTGCTTGCCGAATATCA
TGGTGGAAATGGCCGCTTTCTGGATTCACTGACTGTGCCGGCTGGGTGTGGCGGACCGCT
ATCAGGACATAGCGTTGGCTACCCGTGATATTGCTGAAGAGCTTGGCGGCGAATGGGCTGAC
CGCTTCCTCGTCTTTACGGTATCGCCCTCCCGATTCCGAGCGCATCGCCTTCTATCGCCTTC
TTGACGAGCTTCTGAGGATCGGCCCTAACCTGGTGTGCTGACTAATTGAGATGCATGCTTT
GCATACCTCTGCTGCTGGGAGCCTGGGACTTCCACACCCTAACTGACACACATTCACA
GCTGGTTCTTCCGCCTCAGAAGGTACACAGGCGAAATTGTAAGCGTTAATATTTTGTTAAAA
TTCCGGTTAAATTTTGTAAATCAGCTCATTTTAAACCAATAGGCCGAAATCGGCAAAATC
CCTTATAAATCAAAAGAAATAGACCGAGATAGGGTTGAGTGTGTTCAGTTTGGAAACAAGAG
TCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGCGAAAAACCGTCTATCAGGGCGATG
GCCAC

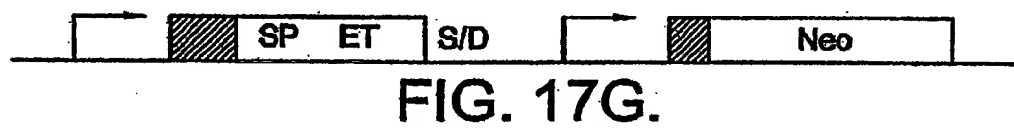
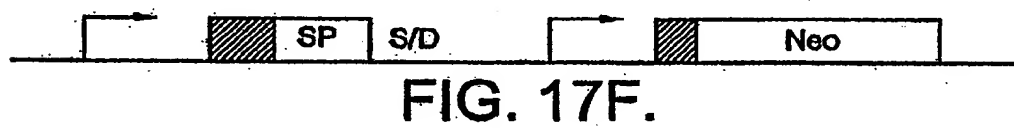
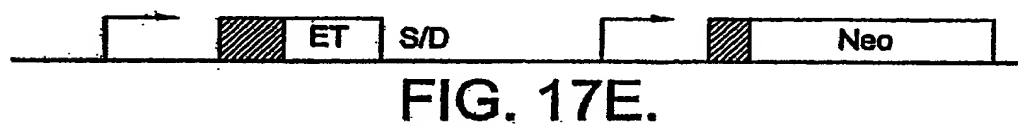
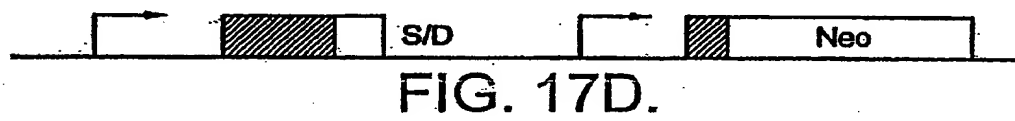
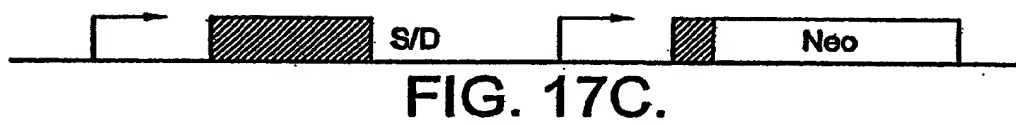
FIG. 15B.

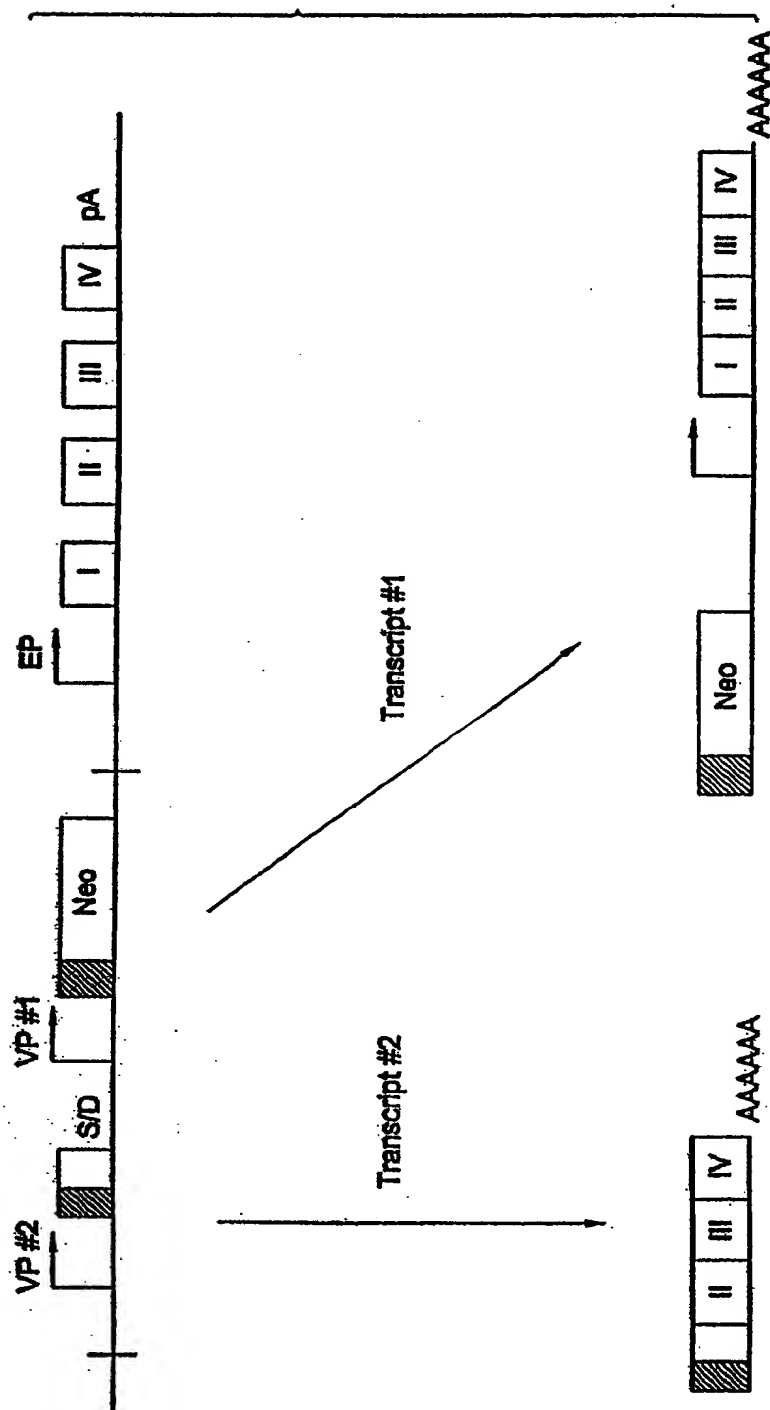
[illegible]

FIG. 16A.

[illegible]

FIG. 16B.



**FIG. 18.**

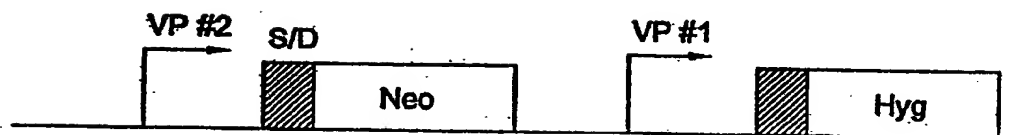


FIG. 19.

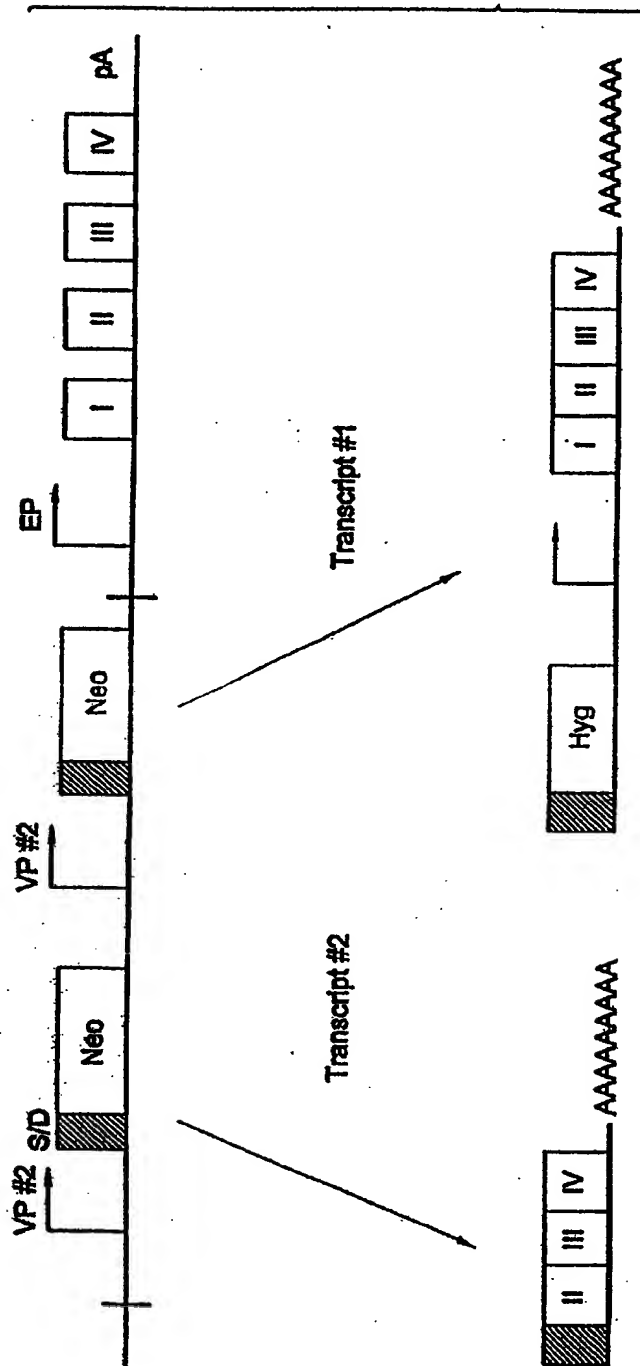


FIG. 20A.

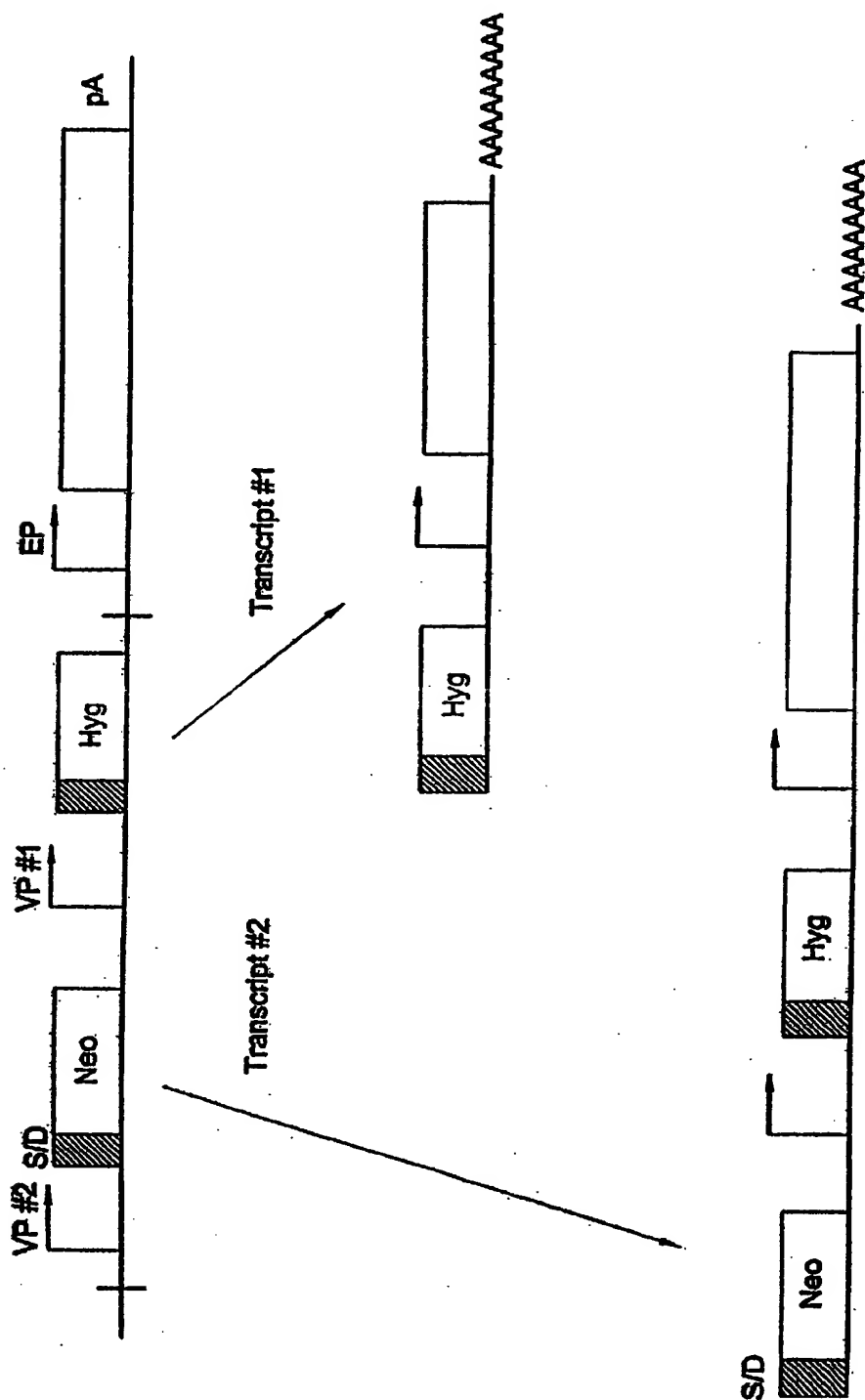
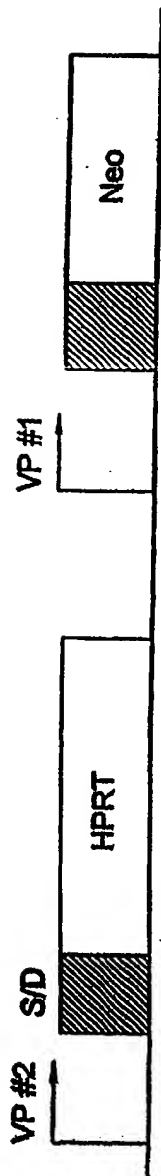


FIG. 20B.

A



B

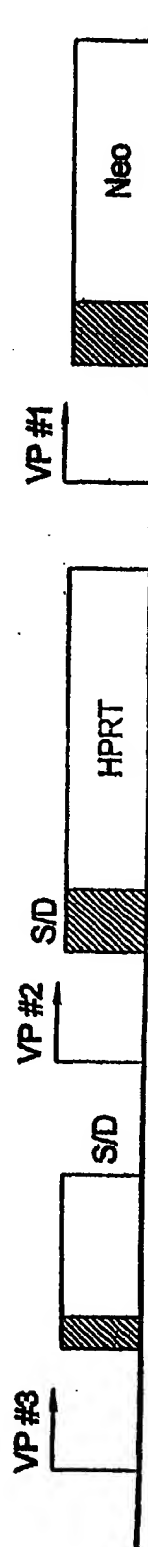


FIG. 21.

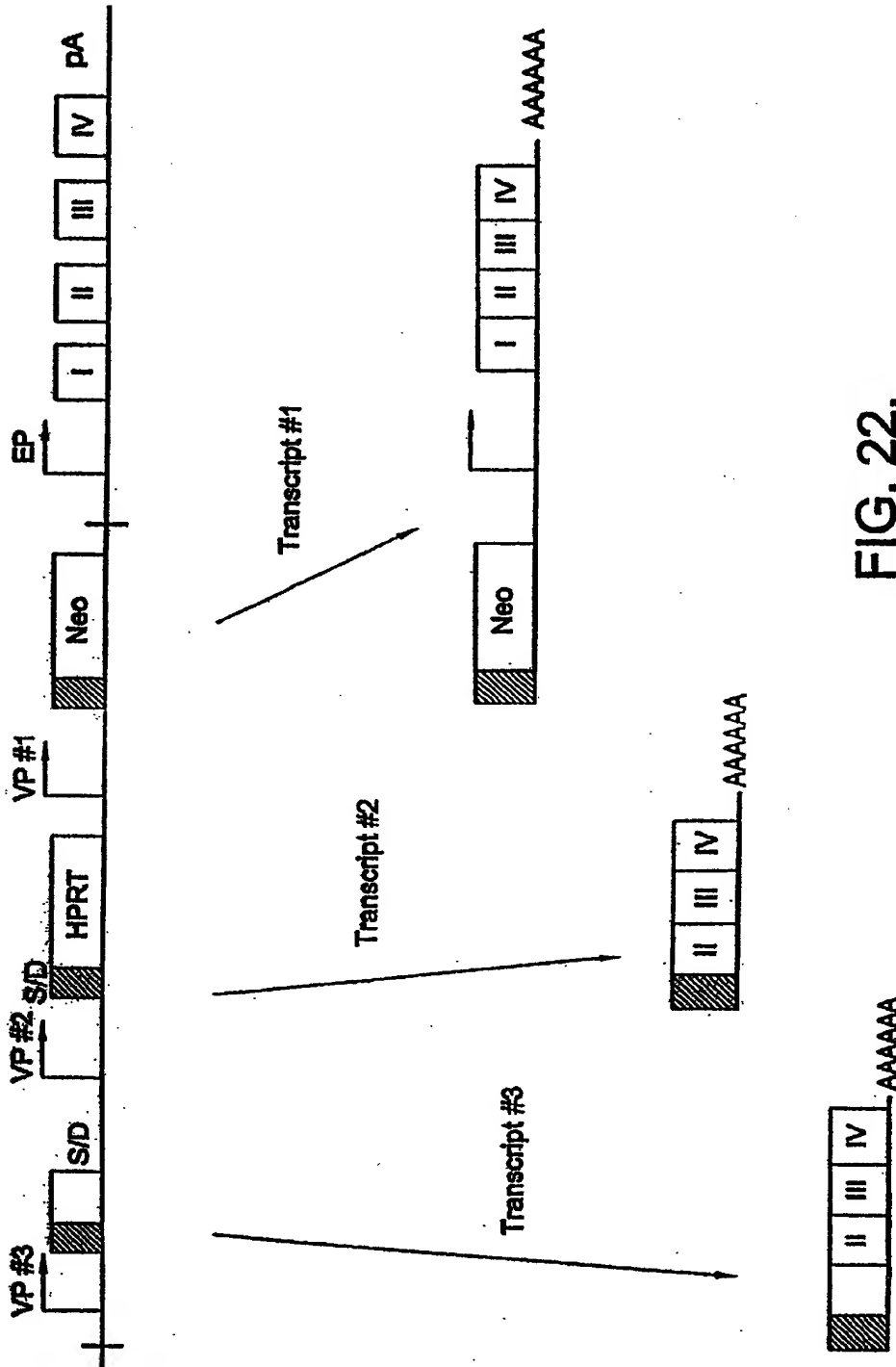
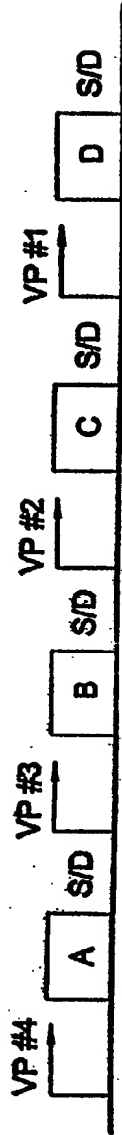


FIG. 22.



Exon A and Flanking Intron

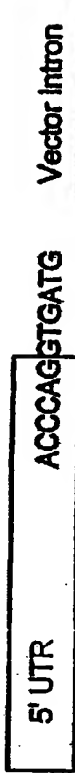


FIG. 23A.

Exon B and Flanking Intron



FIG. 23B.

Exon C and Flanking Intron

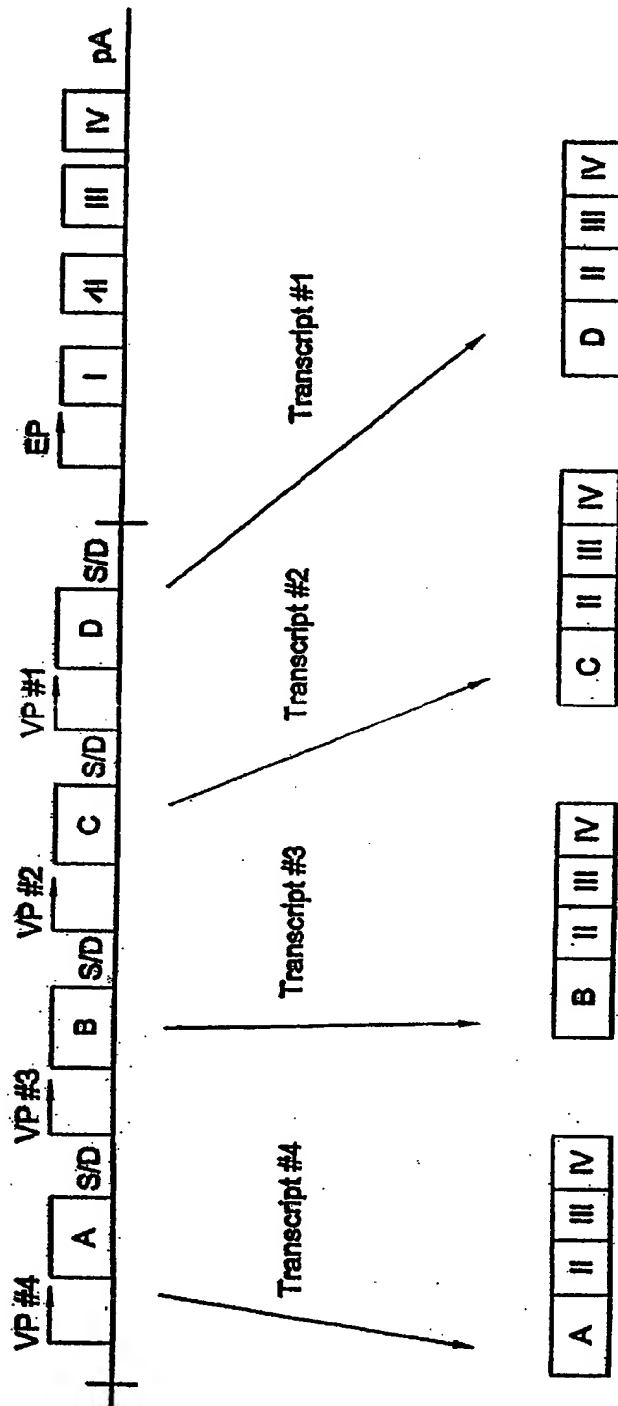


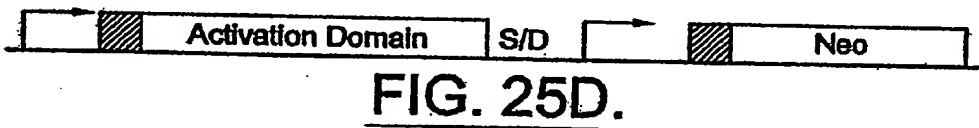
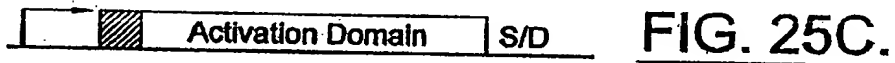
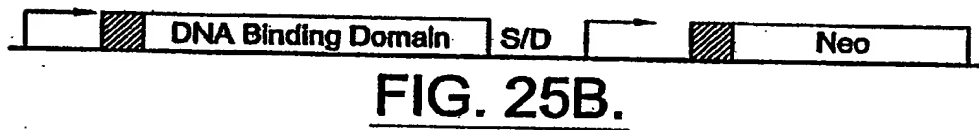
FIG. 23C.

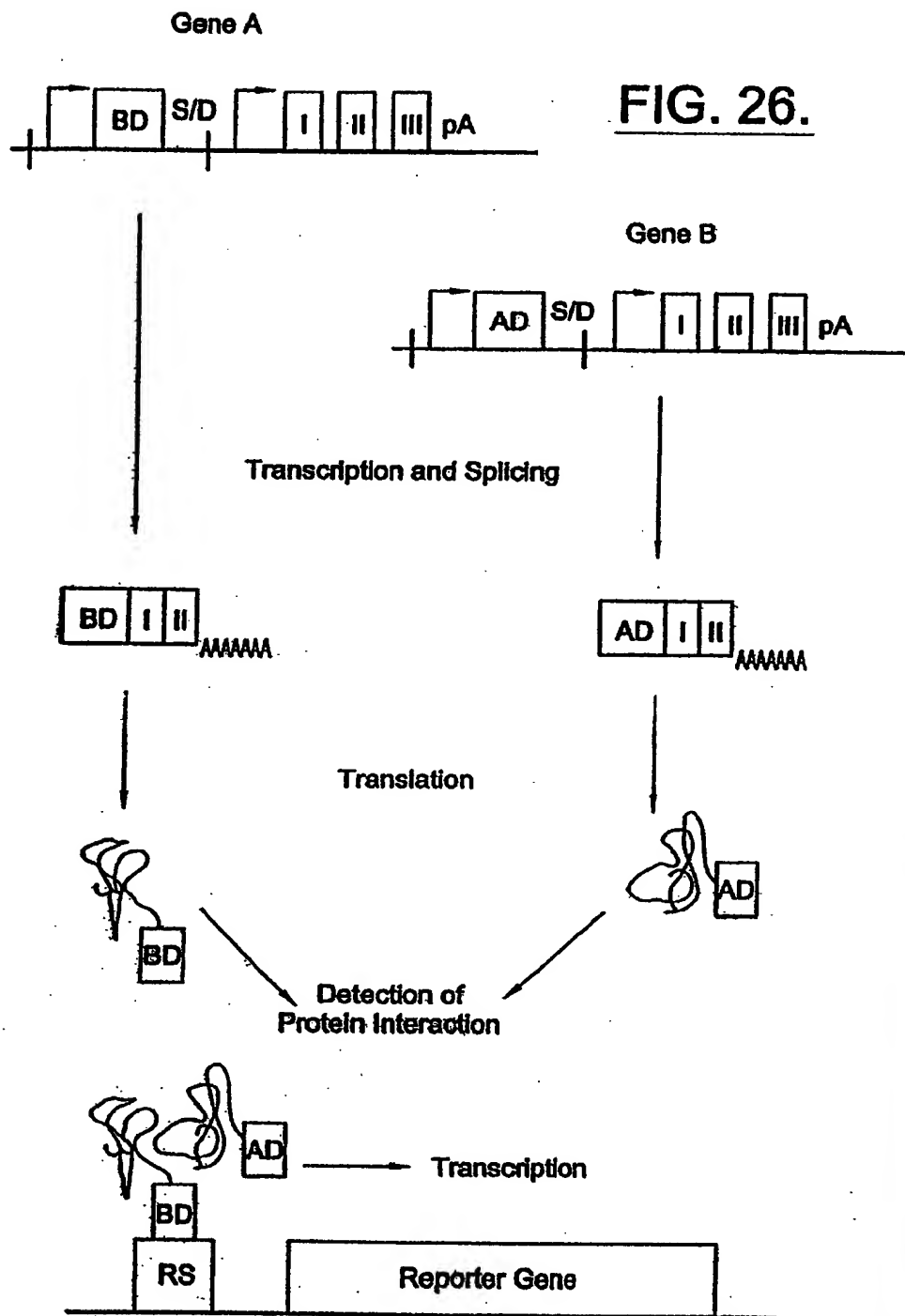
Exon D and Flanking Intron

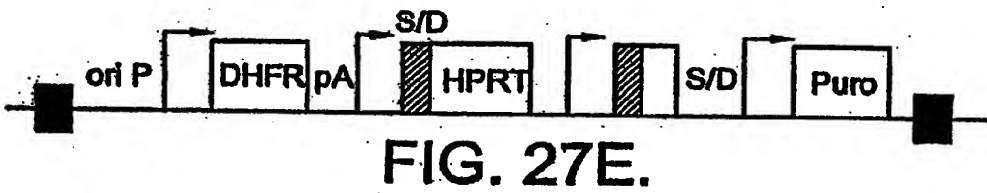
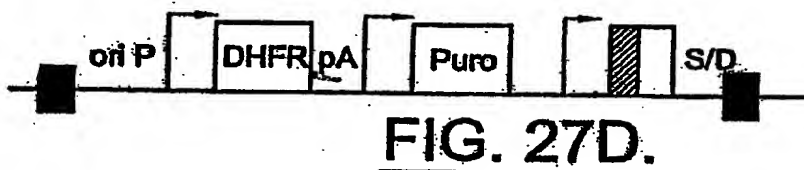
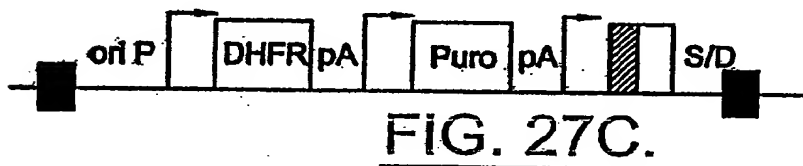
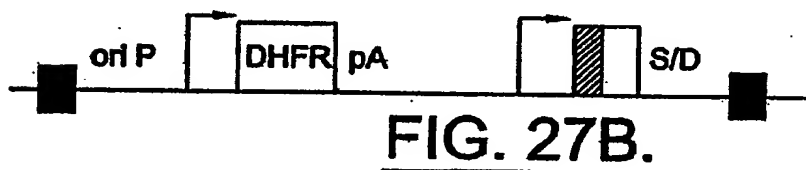
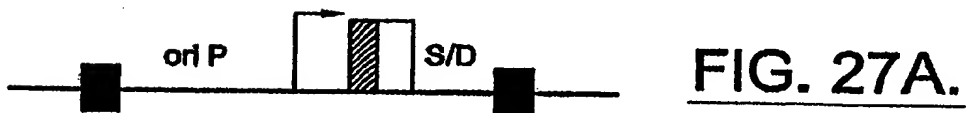


FIG. 23D.

**FIG. 24.**







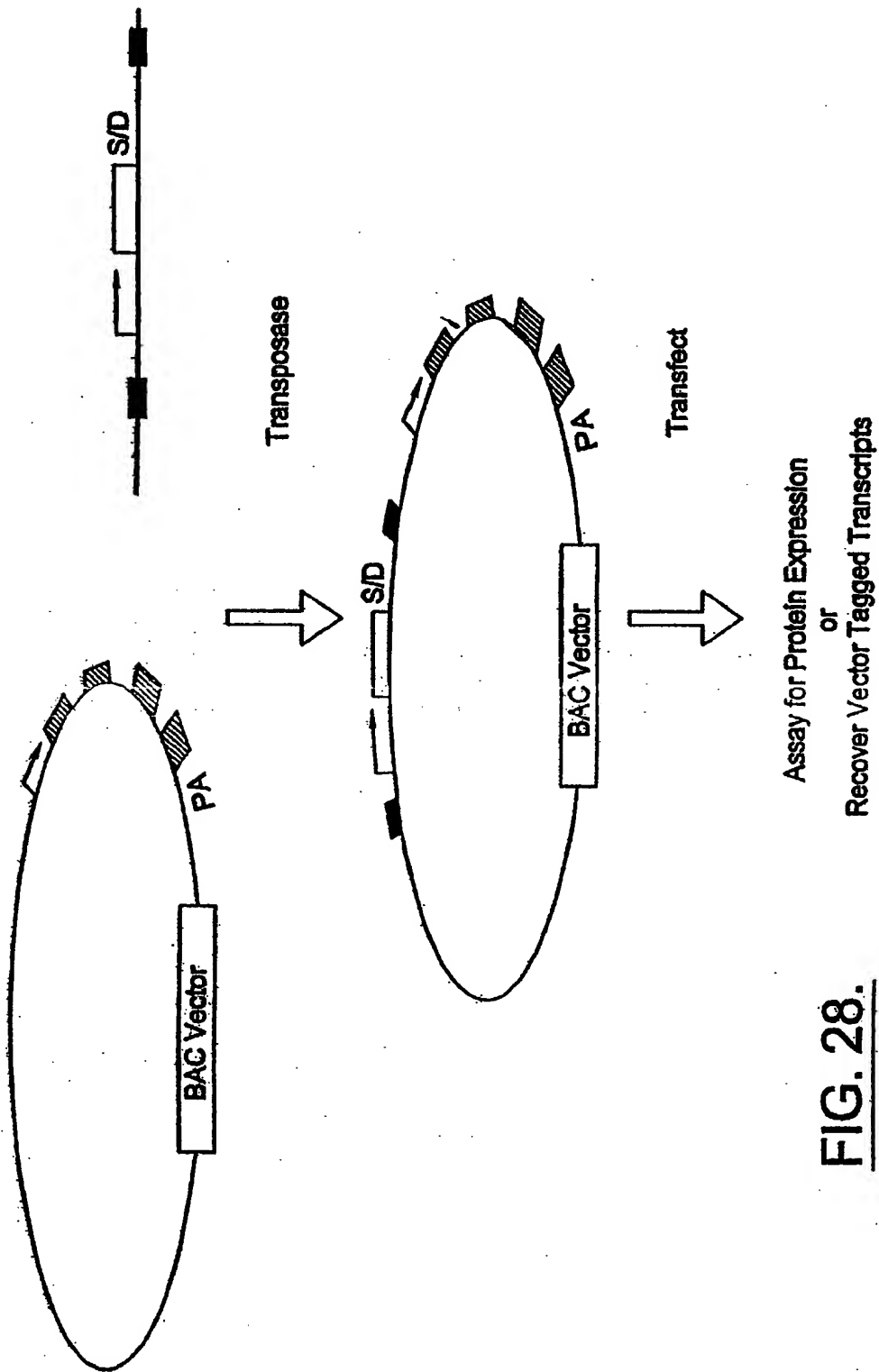


FIG. 28.

FIG. 29A.

GGTGATGCCGGCCACGATGCGTCCGGCGTAGAGGATCCACAGGACGGGTG
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AGGACTGGGCGGCGGCCAAAGCGGTCCGACAGTGCTCCGAGAACGGGTGC
GCATAGAAATTGCATCAACGCATATAGCGCTAGATCCTTGCTAGAGTCGAG
GCCGCCACCGCGGTGGAGCTCCAGCTTTTGTTCCTTTAGTGAGGGTTAAT
TTCGAGCTTGGCGTAATCATGGTCATAGCTGTTTCCTGTGGTGAAATTGTTA
TCCGCTCACAATTCACAACATACGAGCCGGAAGCATAAAGTGTAAG
CCTGGGGTGCCTAATGAGTGAGCTAACTCACATTAATTGCGTTGCGCTCAC
TGCCCCGCTTTCAGTCGGGAACCTGTCGTGCCAGCTGCATTAATGAATCC
GCCAACGCGCGGGGAGAGGCGGTTTGCCTATTGGGCGCTCTTCCGCTTCCT
CGCTCACTGACTCGCTGCGCTCGGTGCTTCGGCTGCGGCGAGCGGTATCAG
CTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCA
GGAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAA
AGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATC
ACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAA
AGATACCAGGCGTTTTCCCTGGAAGCTCCCTCGTGCGCTCTCTGTTCCG
ACCCTGCCGCTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTG
GCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTGCT
CGCTCCAAGCTGGGCTGTGTGCACGAACCCCCCGTTTCAGCCCCGACGGCTGC
GCCTTATCCGCTAATATCGTCTTGAGTCCAACCCGGTAAGACACGACTTA
TCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGT
AGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAG
AAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAA
AAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTG
GTTTTTTTGTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAG
AAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAAAC
CACGTTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTTCACCTAGA
TCCTTTTAAATTAATAATGAAGTTTTAAATCAATCTAAAGTATATAGAGT
AAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCAG
CGATCTGTCTATTTGCTTCATCCATAGTTGCCTGACTCCCCGTCGTGTAGAT
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GCGAGACCCACGCTCACCGGCTCCAGATTATCAGCAATAAACCAGCCAGC
CGGAAGGGCCGAGCGCAGAAGTGGTCTGCAACTTTATCCGCTCCATCCA
GTCTATTAATTGTTGCCGGGAAGCTAGAGTAAGTAGTTCCGCCAGTTAATAG
TTTGCGCAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTACGCTCGTC
GTTTGGTATGGCTTCATTCAGCTCCGGTTCCCAACGATCAAGGCGAGTTAC
ATGATCCCCATGTTGTGCAAAAAGCGGTAGCTCCTTCGGTCTCCGAT
CGTTGTGAGAAGTAAGTTGGCCGAGTGTTATCACTCATGGTTATGGCAGC
ACTGCATAATTCTCTTACTGTGTCATGCCATCCGTAAGATGCTTTTCTGTGACT
GGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTATGCGGCGACCGAG
TTGCTCTTGCCCGGCGTCAATACGGGATAATACCGCGCCACATAGCAGAAC
TTTAAAAGTGCTCATCATTGGAAAACGTTCTTCGGGGCGAAAACCTCTCAAG
GATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGCACCCAA
CTGATCTTCAGCATCTTTTACTTTACCAGCGTTTCTGGGTGAGCAAAAAC
AGGAAGGCAAAATGCCGCAAAAAGGGAATAAGGGCGACACGGAATGT
TGAATACTCATACTCTTCTTTTCAATATTATTGAAGCATTATCAGGGTT
ATTGTCTCATGAGCGGATACATATTTGAATGTATTTAGAAAAATAAACAA
TAGGGGTTCCGCGCACATTTCCCGAAAAGTGC

FIG. 29B.

FIG. 30A.

agccgcctcc tacc tgcana ta tcaagggtgac tigt tgcagct tttgcga tggagtaga tttgcctccct tgggt t tccaccta ta
gtgggaaggggc tgcgcggaggggtga tgcaggaga tgcaggaga tgaaggaggtga tggaga tgaaggatgaaggatga
ggcaggag tga tgaact tigt tggagagcgcct tcaactgt ta taaagccgtgt ta tcccccgcac taaagaa taaatccc
cagttagaca tca tgcgt tgc tigt tggat t t t t cgggcccac t t g t c t t g t c a c c a t t t t g t t c t c c c a c a t g g g c a a t t g g g
ca ta c c c a t g t t g t a c g t c a c t a g e t c c g c t c a a c a c c t t c t c g c t t g g a a a c c t t a g c a c a t t a c c t g g t g a g c
aa t c a g a c a t g c g a c g g c t t t a g c c t g g c c t c c t t a a a t t c a c c t a a g a a t g g g a g c a a c c a g c a t g c a g g a a a g g a c a
a g c a g c g a a a t t c a c g c c c c t t g g g a g g t g g c g g c a t a t g c a a a g g a t a g c a c t c c c a c t c a c t a g g t a t c a t a t
g c t g a c t g t a t a t g c a t g a g g a t a g c a t a t g c t a c c c g g a t a c a g a t t a g g a t a g c a t a t a c t a c c a g a t a t a g a t a g g a t
a g c a t a t g c t a c c a g a t a t a g a t t a g g a t a g c c t a t g c t a c c a g a t a t a a a t t a g g a t a g c a t a t a c t a c c a g a t a t a g a
t t a g g a t a g c a t a t g c t a c c a g a t a t a g a t t a g g a t a g c c t a t g c t a c c a g a t a t a a a t t a g g a t a g c a t a t a c t a c c a g
a t a t a g a t t a g g a t a g c a t a t g c t a c c a g a t a t a g g a t t a g g t g a t a t a t g c t a c c a g a t a t a a a t t a g g a t a g c a t a t a c t a c c a t
a a t c t c t a t t a g g a t a g c a t a t g c t a c c c g g a t a g a g t a g g a t a g c a t a t a c t a c c a g a t a t a g a t t a g g a t a g c a t a t g c
t a c c c a g a t a t a g a t t a g g a t a g c c t a t g c t a c c a g a t a t a a a t t a g g a t a g c a t a t a c t a c c a g a t a t a g a t a g g a t a t g c
g a t a t g c t a c c a g a t a t a g a t t a g g a t a g c c t a t g c t a c c a g a t a t a g a t t a g g a t a g c a t a t a c t a c c a g a t a t a g a t a g g a t a t g c
g t a g t a t a t g c t a c c a t g g a c a t a t a g c c a c c g t g c t c t a g c a g a c t c g t g a a t a t g a g g a c c a a c c c t g t g c t t
g g c g c t a g g c g a a g t g t g t a a t t t g t c c t c a g a t g c a g a a t g c g c c c a t a t c t t g g c c c c a c c t a c t t a t g
c a g t a t t c c c a g g g t g c a t t a g t g g t t t g t g g g c a g t g g t t t g a c c g a g t g g t t a g c g g g t t a c a t a c a g c c a g
g t a t t a c a c c t t a t t t a c a g t c c a a a c c g c g g c g g t g t g g g g c t g a c g c t g c c c c a c t c c a c a a t t c a a a
a a a a g a g t g g c c a c t t g c t t t g t t a t t g g c c c a t t g g c t t g a g c c a g t t t a a t t t c g g g g t t t a g a c a c a c c a
g t g g a g t c c g t g c t g t g c g c t c a c t c t c t c c c t t g t t a c a a t a g a g t t a c a a a t g g t t a c t t g t c t t g a t c c c
t g c t g g g a c a c t c t a a t a a c c c a g t a t c a t a t t g c a t a g g a t t a t g t t g t g c c a t a g c a t a a a t t g t t g a g a t g g
a c a t a g t c t t t a c g c t t g t c c c a c c c a t g g a t t c t a t t g t t a a g a t a t t a g a a t g t t t a c t t c a c t a g t a t t a t t
g c c c a g g g g t t g t g a g g t t a t t t g g t g t c a t a g c a a t g c a c c a c t g a a c c c c c g t c c a a a t t t a t t c t g g g g
c g t a c c t g a a a c c t g t t t t g a g a c c t a c a t a c a c c t t a c t g t t a c a c t a g c a g t t a t t c t a t a g c t a a a c g a a g
a g a t g a a g a g c a g g c a g a g a t t a g g a g a g t t a c t t g c c g c t c t g a t c t a g c a c t g c c t t g t a c t a a a t g
g t t a c t a c c t c g t g a a t c c t g a c c c a t g t a a a t a a a c c g t g a c a g c t a t g g g t g g g a g a t a g c t g t t c t t a g
g a c c t t t a c t a a c c t a a t t g a t a g a t a t g c t c c c g t t g g g t a c a t a t g c t a t g a a t t a g g t t a g c i g g a t a g t a t
a t a c t a c t a a c c g g a g a t a t g c t a c c g t t a g g t t a a c a a g g g g c c t t a a a c a c t a t t g c t a a t g c c t c t t g a g
g g t c c g t t a t g g t a g c t a c a c a g c c c c t g a t t a g c t g g t t g t g a c c c c g t a c t t c t t g g c c a c c t g g g a g t
a c a t g t c c c c a g c a t g g t g t a a g a g c t t a g c a a g a g t t a c a c t a a a g g c a t g t t g t t g t t a g c a g c a g a t g c a
a a g t c t g c t c a g a t g a a a g c a c t a g t t g g c a a t g t g c a c t a c a t t a t a a g g a t g t a c a c t a c a g t c a g a a c
c c c t t g t t t g g t c c c c c c g t g t a c a t g t g g a a a g g g c c a g t t g g c a g t t g t a c c a c c a c t g a a g g a t t a c
a t g c a t g c c c c g a a t a c a a a a a a a g c c t c c t g t a c a a g c a a g a a g g g c a g a t g c g t a g t a c a g g t t a g t
c g t c c g c g g g G C G G C C G A A G G C G C G C C G G A T C C A C A G G A C G G G T G T G G T C
G C C A T G A T C G C G T A G T C G A T A G T G G C T C C A A G T A G C G A A G C G A G C A G G A C
T G G G C G C G C G C C A A G C G G T C G G A C A G T G C T C C G A G A A C G G G T G C G C A T A
G A A A T T G C A T C A A C G C A T A T A G C G T A G A T C C T T G C T A G A G T C G A G A T C T G
T C G A G C C A T G T G A G C A A A A G G C C A G C A A A A G G C C A G G A A C C G T A A A A A G G
C C G C G T T G C T G G C G T T T T T C C A T A G G C T C C G C C C C C T G A C G A G C A T C A C A
A A A A T C G A C G C T C A A G T C A G A G G T G G C G A A A C C C G A C A G G A C T A T A A A G A
T A C C A G G C G T T T C C C C T G G A A G C T C C C T C G T G C G C T C T C C T G T T C C G A C C
C T G C C G C T T A C C G G A T A C C T G T C C G C T T T C T C C C T T C G G G A A G C G T G G C G
C T T T C T A T A G C T C A C G T G T A G G T A T C T C A G T T C G G T G T A G G T C G T T C G C T
C A A G C T G G G C T G T G T G C A C G A A C C C C C G T T C A G C C C G A C C G C T G C G C C T
T A T C C G G T A A C T A T C G T C T T G A T C C A A C C C G G T A A G A C A C G A C T A T C G C
C A C T G G C A G C A C C C A C T G G T A A C A G G A T A G C A G A G C A G G T A T G T A G G C
G G T G C T A C A G A G T T C T T G A A G T G G T G G C C T A A C T A C G G C T A C A C T A G A A G
G A C A G T A T T T G G T A T C T G C G C T C T G C T G A A G C C A G T T A C C T T C G G A A A A A G
A G T T G G T A G C T C T T G A T C G G C A A A C A A A C C A C C G T G G T A G C G G T G G T T -

FIG. 30B.

FIG. 30C.

[illegible]

FIG. 31A.

FIG. 31B.

TTTTTGTTCGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAA
TATCCTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAAACGAAACTCA
CGTTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTTCACCTAGATC
CTTTTATCGGTGTGAAATACCGCACAGATGCGTAAGGAGAAAAATACCGCAT
CAGGAAATTGTAAGCGTTAATAATTGAGAAGAACTCGTCAAGAAGGCGAT
AGAAGGCGATGCGCTGCGAATCGGGAGCGGCGATACCGTAAAGCACGAGG
AAGCGGTGAGCCCATTCGCCGCCAAGCTCTTCAGCAATATCACGGGTAGCC
AAGCCTATGTCCTGATAGCGGTCCGCCACACCCAGCCGGCCACAGTCGATG
AATCCAGAAAAGCGGCCATTTTCCACCATGATATTCGGCAAGCAGGCATCG
CCATGGGTGACGACGAGATCCTCGCCGTCGGGCATGCTCGCCTTGAGCCTG
GCGAACAGTTCGGCTGGCGCGAGCCCTGATGCTCTTCGTCCAGATCATCC
TGATCGACAAGACCGGCTTCCATCCGAGTACGTGCTCGCTCGATGCGATGT
TTCGCTTGGTGGTGAATGGGCAGGTAGCCGGATCAAGCGTATGCAGCCG
CCGATGCATCAGCCATGATGGATACTTTCTCGGCAGGAGCAAGGTGAG
ATGACAGGAGATCCTGCCCGGCCACTTCGCCCAATAGCAGCCAGTCCCTTC
CCGCTTCAGTGACAACGTCGAGCACAGCTGCGCAAGGAACGCCCGTCGTG
GCCAGCCACGATAGCCGCGCTGCCTCGTCTTGCAAGTTCATTACAGGGCACCG
GACAGGTGGTCTTGACAAAAAGAACCGGGCGCCCTGCGCTGACAGCCG
GAACACGGCGGCATCAGAGCAGCCGATTGTCTGTTGTGCCAGTCATAGCC
GAATAGCCTCTCCACCCAAGCGGCCGAGAACCTGCGTGCAATCCATCTTG
TTCAATCATGCGAAACGATCCTCATCCTGTCTCTTGATCAGAGCTTGATCC
CCTGCGCCATCAGATCCTTGGCGGCGAGAAAGCCATCCAGTTTACTTTGCA
GGGCTTGTCAACCTTACCAGATAAAAGTGCTCATCATTGGAAAAatttattt
cgaactcgaattctaccgggtaggggaggcgttttcccaaggcagtcaggagcagtcgctttagcagcccgctgggc
acttggcgtacacagtggtcttggtctgcacacattccacacacacaggtaggcgccacccggctccgtttcttggg
ggcccttcgcgcacacttctactctcccttagtcagggaagtcccccacggcccgancctggctcgtgcaggacgtg
acaaatggaaatagcagctctacttagtcctgtgcagatggacaagcagcctgagcagatggagcgggtaggccttggg
gcagcgcccaatagcagctttgtctcttgcctttctgggtcagaggttggaagggttgggtccggggcggtcag
ggcggggtcagggcgggcgggcgccgaaggtctccggagggccggcattctgcacgttcaaaagcgacgt
ctgcggcgtgttctctcttctctctctcggggcctttgacctgcaacacctagatctgcagcagctgaagcttacaaga
ccgagtaacagccacgggtggccttcgcaccccgacgacgagctcccccggcggtacgcacccctgcggcgcggttcg
ccgactaccccgccagcgccacacccgtgcacccggacggccacacagaggggtacagagctgcaggaactcttct
cagcgcggtcgggtcgcacacaggaaggtgtgggtgcgggacgagcgcccggtggcggtctggacacggcg
gagagcgtcgaagcgggggcggtgttcgcggagatcggccggcgcatggccgagttgagcggttcccgctggcg
gcagcacaagatggagggctcttggcgcgacacgggcccagggagccggcggtgttcttggccacagctgggc
gtcttcgcccgaacacagggcaggggtctggcaagcgcggtcgtgtctcccgaggtggagggcgccgagcgcg
gggtgcggcgttcttggagacctcgcgcacccgcaacctcccttctagagcggctgggttcaacgtcacggcgac
gtcgaggtgcgggaaggacggcgaccttgggtgcatgacccgaagccgggtgcttgcgcccgcacacgaacggca
ggcgcgacgaaggagcgacgacccatgcatgcatggcactgggcaggtaagtataaggttagcGGCCGC
TAACCTGGTTGCTGACTAATTGAGATGCATGCTTTGCATACTTCTGCCTGCT
GGGGAGCCTGGGGACTTTCCACACCCTAAGTACACACATTCCACAGCTGG
TTCTTTCCGCCTCAGAAGGTACACAGGCGAAATTGTAAGCGTTAATATTT
GTAAAAATTCGCGTTAAATTTTGTAAATCAGCTCATTTTTTAACCAATAG
GCCGAAATCGGCAAAATCCCTTATAAATCAAAAAGAAATAGACCGAGATAGG
GTTGAGTGTGTTCCAGTTTGGAAACAAGAGTCCACTATTAAAGAACGTGGA
CTCCAACGTCAAAGGGCGAAAAACCGTCTATCAGGGCGATGGCCAC.

FIG. 31C.

FIG. 32A.

FIG. 32B.

FIG. 32C.

FIG. 33A.

FIG. 33B.

[illegible]

FIG. 33C.

TCATTTTTTAACCAATAGGCCGAAATCGGCAAAATCCCTTATAAATCAAAA
GAATAGACCGAGATAGGGTTGAGTGTTGTTCCAGTTTGAACAAGAGTCC
ACTATTAAAGAACGTGGACTCCAACGTCAAAGGGCGAAAAACCGTCTATC
AGGGCGATGGCCAC

FIG. 33D.

[illegible]

FIG. 34A.

[illegible]

FIG. 34B.

[illegible]

FIG. 35A.



FIG. 36.

FIG. 37A.

FIG. 37A.

TTTTTGTTCGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAA
GATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAACTCA
CGTTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTTCACCTAGATC
CTTTTATCGGTGTGAAATACCGCACAGATGCGTAAGGAGAAAAATACCGCAT
CAGGAAATTGTAAGCGTTAATAATTAGAAAGAACTCGTCAAGAAGGGCAT
AGAAGGGCATGCGCTGCGAATCGGGAGCGGGATACCGTAAGCAGCAGG
AAGCGGTACGCCATTTCGCCGCCAAGCTCTTCAGCAATATCACGGGTAGCC
AACGCTATGCTCTGATAGCGGTCCGCCACACCCAGCCGGCCACAGTCGATG
AATCCAGAAAAGCGGCCATTTCCACCATGATATTCGGCAAGCAGGCATCG
CCATGGGTACGACGAGATCCTCGCCGTGGGCATGCTCGCCTTGAGCCTG
GCGAACAGTTCGGCTGGCGCGAGCCCTGATGCTCTTCGTCCAGATCATCC
TGATGGACAAGACCGGCTTCCATCCGAGTACGTGCTCGCTCGATGCGATGT
TTCGCTTGGTGGTGAATGGGCAGGTAGCCGGATCAAGCGTATGCAGCCG
CCGCATTGCATCAGCCATGATGGATACTTTCTCGGCAGGAGCAAGGTGAG
ATGACAGGAGATCCTGCCCGGCACTTCGCCCAATAGCAGCCAGTCCCTTC
CCGCTTCAGTGACAACGTGAGCACAGCTGCGCAAGGAACGCCCGTCGTG
GCCAGCCACGATAGCCGCGCTGCCTCGTCTTGCAAGTTCATTACGGGCACCG
GACAGGTGGTCTTGACAAAAAGAACCGGGCGCCCTGCGCTGACAGCCG
GAACACGGCGGCATCAGAGCAGCCGATTGTCTGTTGTGCCAGTCATAGCC
GAATAGCCTCTCCACCCAAGCGGCCGAGAACCTGCGTGCAATCCATCTTG
TTCAATCATGCGAAACGATCCTCATCCTGTCTCTTGATCAGAGCTTGATCC
CCTGCGCCATCAGATCCTTGGCGGCGAGAAAGCCATCCAGTTTACTTTGCA
GGGCTTGTCAACCTTACCAGATAAAAGTGCTCATCATTGGAATAATTGAT
cgaactcgaattctacgggtagggaaggcgttttcccaaggcagctcggagcatgcgttttagcagcccgctggc
acttggcgtacacaaagtggcctctggcctgcacacattccacatccacgggtaggcgcacacggcctccgttctttggt
ggcccttgcgcacaccttctactcttcccttagtcaggaaagtccccccgcggcgancctgcgtctgtgcaggacgtg
acaaatggaaatagcagctctcactagctctgtgcagatggacaaagcagctgagcaatggagcgggtaggcctttggg
gcagcggcgaatagcagctttgtctcttgcgtttctgggtcagaggctggnaagggtgggtccggggcgggctcag
ggcgggtcagggcgggcgggcgggcgccgaaggctcctccggaggcccgacattctgcacgttcaaaagcgacgt
ctgcggcgtgtttctctctctctctctccgggttttgcactgcatctctctctctctctctctctctctctctctct
ccggtacaaagcccaaggctgcgtctgcacacccgcagcagctccccggggcggtacgcaaccctgcgcggcggttgc
ccgactacccgcacagcgccacacccgtgcacccggacggccacacacagcgggtacccgagctgcagaaactcttct
cagcggttgggtctgcacacagcaggttgggtgcgggacacggcgccgggtggcggttctggacacggcg
gagcggtgcagcggggcggtgttgcggagctgcggcgccacacagcgggttgcgggttgcgggttgcgggttgcgggt
gcagcaacagctgggtgggttgcggcgccacacgggtgcgggttgcgggttgcgggttgcgggttgcgggttgcgggt
gtcttgcggcgccacacgggttgcgggttgcgggttgcgggttgcgggttgcgggttgcgggttgcgggttgcgggt
gggttgcgggttgcgggttgcgggttgcgggttgcgggttgcgggttgcgggttgcgggttgcgggttgcgggttgcgggt
gtcgggttgcgggttgcgggttgcgggttgcgggttgcgggttgcgggttgcgggttgcgggttgcgggttgcgggttgcgggt
ggcgccgacgggaaggagcgacgaacccaatgcacatgcagtggaactgggcaggttaagtaacagggttagcGGCCGC
TAACCTGGTTGCTGACTAATTGAGATGCATGCTTTGCATACTTCTGCCTGCT
GGGGAGCCTGGGGACTTTCCACACCCTAACTGACACACATTCCACAGCTGG
TTCTTTCCGCCTCAGAAGGTACACAGGCGAAATTGTAAGCGTTAATATTTT
GTTAAATTCGCGTTAAATTTTGTAAATCAGCTCATTTTTTAACCAATAG
GCCGAAATCGGCAAAATCCCTTATAAATCAAAAGAATAGACCGAGATAGG
GTTGAGTGTTGTTCCAGTTTGGAAACAAGAGTCCACTATTAAGAAGCGTGA
CTCCAACGTCAAAGGGCGAAAAACCGTCTATCAGGGCGATGGCCAC

FIG. 37C.

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